

Colony of Fiji

COUNCIL PAPER No. 50.

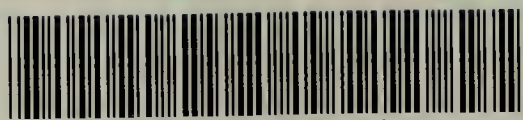
ANNUAL REPORT
OF THE
MEDICAL DEPARTMENT
1952-53

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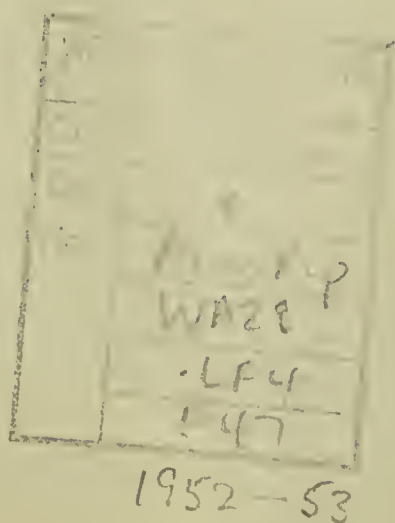
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1954

LEGISLATIVE COUNCIL
FIJI

COUNCIL PAPER No. 50.

MEDICAL DEPARTMENT

(CONSOLIDATED ANNUAL REPORT FOR 1952 AND 1953.)

ADMINISTRATION

ESTABLISHMENT AND STAFF

MEDICAL DIRECTORATE

The Departmental Establishment is shown at Appendix I to this report. Dr. J. M. Cruikshank, C.M.G., O.B.E., Director of Medical Services, Fiji (also Inspector-General, South Pacific Health Service) proceeded on leave from 15th March, 1952 to 17th December, 1952.

APPOINTMENTS, ETC.

2. Dr. R. W. D. Maxwell to act as Inspector-General, South Pacific Health Service and Director of Medical Services 15/3/52.
Dr. R. W. D. Maxwell, Senior Medical Officer, to be Deputy Director of Medical Services 14/9/52.
Dr. K. R. Steenson, Deputy Director of Medical Services retired on conclusion of leave 14/3/53.

LEGISLATION

3. Legislation of medical interest enacted was as follows:—

- 1952: Legal Notice No. 35, amending Visitors' Rules, Levuka.
Legal Notice No. 44, increasing Sanitary Service charges.
Legal Notice No. 76, redefining an "Eating House" so as to include a licensed hotel.
Legal Notice No. 87, adding certain drugs to the Poison schedules.
Legal Notice No. 142, deleting certain charges for disinfection of aircraft.
1953: Legal Notice No. 116, prohibiting the carriage of water on any milk-delivery wagon or other milk vehicle.

FINANCE

4. Revenue and Expenditure of the Department:—

	1952	1953
Gross Expenditure	£631,676	£655,575
Revenue	59,275	76,926
Nett Expenditure	572,401	578,649
Percentage of Colony's Expenditure . .	13 per cent	13 per cent
Expenditure per head of population . .	36s. 7d.	38s. 8d.

The following table shows the expenditure on Medical and Health Services per head of the population, over the past 17 years.

Year	Total Population	Expenditure per head
1936	201,086	8s. 1d.
1939	215,030	10s. 7d.
1942	233,895	10s. 1d.
1944	246,485	12s. 1d.
1945	254,676	14s. 2d.
1946	260,468	16s. 6d.
1947	269,274	20s. 8d.
1948	277,372	24s. 4d.
1949	284,955	25s. 0d.
1950	293,764	27s. 2d.
1951	301,959	32s. 10d.
1952	312,678	36s. 7d.
1953	320,801	38s. 8d.

COLONIAL DEVELOPMENT AND WELFARE PROJECTS

5. *Central Medical School*—The new building was completed towards the end of 1953 and was graciously opened by Her Majesty the Queen on 17th December, in the presence of a large gathering. Appendix XIII.

Tuberculosis Survey—This work was continued during the period and is described under Appendix VI to this Report.

Central Medical Research Library—This Library was taken over by the Fiji Government as a departmental function in 1951. Its Reports for 1952 and 1953 are added at Appendix XIV.

RESEARCH

6. *Nutrition*—Two dietary surveys have been carried out at the Fijian village of Naduri near Sigatoka on Viti Levu.

Samples of coconuts at varying stages of development have been sent to the Home Science School, Dunedin, New Zealand, for analysis. Appendix XII.

Hetrazan (Diethylcarbamazine)—Experiments in mass administration of Hetrazan were carried out during 1953 in selected areas, the main object being to determine the minimum effective dosage. The whole population of each area had blood examined for microfilariae and all positives were treated in three groups, as follows:—

Beqa Island—172 positives given 3 x 50 mgm. three times daily for seven days.

Ra Province—242 positives given three doses of 1 x 50 mgm. during the day on one day each month.

Tailevu Province—245 positives given 3 x 50 mgm. three times daily for three days.

In all cases blood examinations were repeated every six months. Resultant data are shown at Appendix XI, and further large scale experiments are to be made in 1954.

Malaria Vectors—Squadron-Leader Laird, D.Sc., of the Royal New Zealand Air Force, has continued his work on the investigation of malaria vectors of the Pacific Islands. He has been afforded bench space and laboratory facilities at the Pathological Laboratory in Suva. His reports are submitted to New Zealand and no information as to findings or progress of this work has yet been made available to this Department.

Demography—Research has continued into the demography of Fijians; which has been in progress for a number of years. The information amassed has proved of distinct advantage in connexion with the leprosy and tuberculosis registers and control programmes. Interesting data on the epidemiology of leprosy are being observed. These demographic studies should be of further value if the proposed mass anti-yaws campaign proceeds.

MEDICAL STORES AND EQUIPMENT

7. Issues from the Government Pharmacy and Medical Stores have been:—

	1952-1953 Medical Stores, to Nearest £ Value					
	Drugs & Instruments		Clothing and Bedding		Total	
	1952	1953	1952	1953	1952	1953
	£	£	£	£	£	£
Cash Sales	469	407	....	....	469	407
Special Hospitals	9,979	10,058	4,148	4,169	14,127	14,227
General Hospitals	22,473	22,821	7,061	7,019	29,534	29,840
Rural Hospitals	4,670	4,172	1,212	1,844	5,882	6,016
Rural Dispensaries	5,095	4,600	34	57	5,129	4,657
Health Sisters	1,068	1,668	272	361	1,340	2,029
Nurses	2,231	2,504	755	758	2,986	3,262
Missions	77	105	11	....	88	105
Other Medical	105	292	74	73	179	365
Other Departments	1,651	873	137	56	1,788	929
	47,818	47,500	13,704	14,337	61,522	61,837

THE PUBLIC HEALTH

GENERAL REMARKS

8. The Director of Medical Services is Chairman of the Central Board of Health which controls and co-ordinates the public health activities throughout the Colony.

There are 22 Local Health Authorities constituted under the Public Health Ordinance (1936) whose duties are concerned with carrying into effect this Ordinance and Regulations made thereunder. The Local Authorities also take charge of the local aspects of Town Planning and Sub-division of lands in their own areas.

Each District Medical Officer in the three Districts into which the Colony is divided is a Medical Officer of Health to the Local Authorities within his District; and in this capacity he is assisted by a trained staff of Health Inspectors, Health Sisters, Assistant Health Inspectors, Assistant Nurses, and other junior staff.

The Colony is divided into 48 areas each having an Assistant Medical Practitioner at a Rural Hospital or Rural Dispensary. He is responsible to his Medical Officer of Health in matters of communicable diseases. Each of the three Districts forwards to headquarters a weekly statement of the incidence of notifiable infectious diseases within its boundaries. Guidance is then given when needed by headquarters so that preventive or controlling measures may be as thorough as possible.

Fiji as a participating member of the South Pacific Health Service takes part in the monthly telegraphic exchange of epidemiological information among territories concerned.

COMMUNICABLE DISEASES

9. General tables of the incidence of these diseases is given at Appendix II to this Report.

Influenza—This showed some decline during the period under review, and it appears that the pandemic is on the wane. The reported cases dropped from 4,778 to 3,179.

Enteric group of diseases—The fall in the incidence of these diseases was gratifyingly continued, the number of cases among Fijians being less than one-quarter, and among non-Fijians less than one-ninth, of that in 1949. This reduction is attributed to perseverance in the Colony-wide anti-typhoid inoculation campaign, and improvements effected in general sanitation.

Dysenteries—The fall in reported cases of non-amoebic dysentery was continued, total cases being less than one-third of those in 1949. Notification of dysentery as amoebic is confined to those cases in which diagnosis is bacteriologically confirmed, so that positive cases do not appear in the returns from the remoter rural areas.

Infantile diarrhoea is discussed in paragraph 11 below.

Pertussis—There was a notable decline in the incidence of whooping cough, to less than one-half of the 1952 figure. It would therefore appear that this disease, which has shown a recurrence on an eight-year cycle, is retreating.

Yaws—This remains a serious problem in all areas among the indigenous Fijians. The disease was for many years kept under partial control by expensive injections of organic arsenicals, though many cases appeared to be resistant to this treatment. After the late war, the high cost of arsenicals compelled the Department to attempt a substitution with bismuth salts, but this scheme has proved unacceptable to the people, on account of unpleasant side-effects and the great pain that has often accompanied intramuscular injection of "Sobita". As a result, patients have failed to report for yaws, or failed to return after a single injection. It has been most notable that where the new preparations of penicillin have been on trial, results have been so striking that patients have appeared from distant areas at a clinic where it was known penicillin was on clinical trial.

At the invitation of the Government, Dr. Donald Huggins of the World Health Organization Regional Office at Manila, made a visit of exploration in November and December 1953, and enquired into the yaws problem in Fiji. It is hoped that an arrangement may be made for the acceptance of World Health Organization assistance in a Colony-wide programme of penicillin therapy against yaws in 1954.

Tuberculosis is discussed in Appendix VI of this Report.

Hookworm—The incidence of this disease remains low: the reported figure being less than 200 cases for the whole Colony.

Dengue Fever—After a slight rise to 135 in 1952, the number of cases fell to 60 in 1953. This reflects the intensive anti-mosquito measures in force throughout the Colony.

Venereal Diseases remain as before at the very low figure of around 200 for gonorrhoea and 20 for syphilis.

Leprosy is discussed at Appendix V to this Report.

10. The table below shows the trends in eleven notifiable diseases for the past five years:—

	1949	1950	1951	1952	1953
Dysentery	655	403	303	267	243
Enteric group	223	207	111	82	35
Gonorrhoea	260	297	232	208	220
Hepatitis, infectious	13	32	25	41	29
Infantile diarrhoea..	798	918	620	750	2,197
Influenza	3,566	5,293	3,280	4,478	3,179
Leprosy	46	39	49	33	40
Pertussis	350	114	234	773	245
Syphilis	54	27	23	21	23
Tetanus	30	27	31	38	33
Tuberculosis . . .	448	373	234	453	498

It will be noted that there has been a steady fall in the number of cases of dysentery during this period. The marked decline in diseases of the typhoid group is attributable to the intensification of inoculation campaigns throughout the Colony. Notifications of venereal diseases have remained remarkably constant, as has leprosy.

11. A division of the intestinal diseases among the indigenous and non-indigenous population is made in the table below.

	1949	1950	1951	1952	1953
Dysentery—					
Fijians	453	80	33	81	80
Others	402	323	116	186	163
Enteric Group—					
Fijians	87	100	36	31	20
Others	136	106	75	51	15
Infantile Diarrhoea—					
Fijians	511	680	474	455	1,562
Others	287	238	136	295	635

12. From this table it is concluded—

- (a) that the general programme of health education and sanitary improvement was more effective among the communal Fijians than among the individually-dwelling other people, since the dysentery figures showed a greater reduction among Fijians.
- (b) that the anti-typhoid inoculation campaign has given a high degree of protection to all races equally;
- (c) that neither general nor special measures protected any race against a widespread epidemic of infantile diarrhoea in 1953, though Fijians were relatively more affected.

MOSQUITO AND FILARIASIS CONTROL

13. A report on this Division is included at Appendix X to this Report. It is noteworthy that a maintenance-dose of 50 mgm. (one tablet) of Hetrazan per month has been found sufficient to keep filariasis (as measured by the average microfilarial count per c.c.) under satisfactory control in a population exposed to constant re-infection.

VITAL STATISTICS

14. The Registrar-General's statement of population for 1952 and 1953 are given in Appendix III. The average increase in population of the Colony for the years 1936–1946 is estimated at 6,126 per annum: while for the years 1946–1953 the figure is 8,632.

The average annual increase for the two major races for the period 1946–1953 is:—

Fijians	3,981
Indians	5,097

The rates of natural increase for the whole population of the Colony were:—

1951	27.22 per mille
1952	28.17 per mille
1953	25.98 per mille

Among the crude birth rates may be noted the following:—

	<i>Crude Birth Rates</i>			
	1950	1951	1951	1953
Fijians	37.11	34.42	36.67	35.18
Indians	42.49	42.45	44.69	46.08
Total Population ..	39.20	37.88	40.02	40.32

The General death rates were:—

Fijians	10.58
Indians	8.12

The Infant mortality rates were:—

	1952	1953
Fijians	79	60
Indians	51	48

HYGIENE AND SANITATION

ADMINISTRATION

15. The administration of the Public Health Ordinance of 1936 is vested in the Central Board of Health and by that Board delegated to 22 Local Health Authorities. Advisory functions are shared between the Director of Medical Services and the Central Board of Health, which body receives reports from, and where necessary directs the activities of, the Local Health Authorities.

16. Port Health and Quarantine activities in the capital city of Suva are in charge of the District Medical Officer, Southern, who, as chief Quarantine Officer, is responsible under the Quarantine Ordinance for that work. All Medical Officers in rural areas are Medical Officers of Health to the Local Health Authorities of the sanitary districts in which they are stationed. Ten Health Inspectors with full qualifications, and 23 Assistant Health Inspectors (locally trained) carry out local duties under the Ordinance, while the Chief Health Inspector, stationed at headquarters, is also Secretary to the Central Board of Health. Public health activities are also carried out by 11 Health Sisters and their staff of locally-trained Assistant Nurses.

17. There are 22 Local Health Authorities in the Colony, and the minutes of 102 meetings in 1952, and 106 in 1953, were forwarded to the Central Board of Health. The Urban Authorities of Suva and Lautoka, the Township Authorities of Levuka and Nausori, and the Rural Authority of the Rewa District, met monthly; the others at irregular intervals as necessary. The Central Board of Health is itself by statute the Health Authority for the special area covered by the International Airport at Nadi on Viti Levu.

18. The Return of the work done by all Local Health Authorities for each of the years now reported on, includes the following figures of interest:—

	1952	1953
General Sanitary Inspections ..	64,031	56,766
Sanitary defects remedied	41,243	19,985
Written notices issued	3,219	3,957
Closing Orders issued	172	324
Demolition ordered	48	118
Buildings demolished	93	184
Food premises inspected	5,566	6,879
Improvements effected	230	1,727
Foodstuffs condemned, in lbs. ..	14,367	46,363
Food samples taken	357	452

19. *Supervision of New Buildings*—The standard of new housing in Township and suburban areas has continued to rise, and some need is now felt for technical (engineering) advice by Local Authorities unable to scrutinize major works now being proposed for erection in their areas. Every new building, where a piped water supply exists, has a septic tank system of sewage-disposal, and concrete is in large measure replacing timber frame construction in buildings.

	1952	1953
New applications received ..	1,133	1,881
Declared value	£631,213	£858,101

20. *Legal Proceedings* were as follows:—

(a) For offences under the Public Health Ordinance:—

	1952	1953
Cases taken to Court	23	61
Convictions obtained	21	59
Penalties imposed	£62	£149

(b) For offences under the Pure Food Ordinance:—

	1952	1953
Cases taken to Court	22	39
Convictions obtained	19	37
Penalties imposed	£161	£278

21. *Sewage Disposal*—Septic Tanks throughout the Colony are required to be constructed according to approved designs. Reinforced cement latrine-slabs are manufactured in Suva by the Medical Department and sold at cost-price in all areas.

	1952	1953
Septic Tank proposals passed	42	58
Latrine-slabs sold	390	267

22. *Garbage Disposal*—There is an organized collection of household and business garbage in 14 sanitary districts, of which one extended its area of service in 1953. About 6,000 premises are now served by official garbage collections.

23. *Rat destruction*—

	1952	1953
Number of traps set	11,988	4,781
Number of rats caught	3,640	934
Rats sent to laboratory	89	48

No rats were found to be infected with plague.

24. *Water-supplies*—These continued to give satisfaction, and no cases were reported of disease attributable to water-borne infections.

	1952	1953
Number of samples taken—		
Bacteriological test	152	104
Chemical test .. ..	....	55
Sea water (public baths)	45	13

SEAPORT AND AIRPORT HEALTH AND QUARANTINE

25. Suva, Lautoka and Levuka are the three permitted Ports of Entry for overseas ships, with Suva and Lautoka the only permitted Ports of Entry from malarial regions. Aircraft come to the International Airport at Nadi, with that at Nausori for emergency purposes, while flying boats enter at the station of the Royal New Zealand Air Force at Laucala Bay, Suva.

26. During the period under review the following were the numbers concerned:—

	1952	1953
Ships given pratique	142	194
Landing passengers	1,974	1,954
Aircraft given pratique	980	921
Landing passengers	6,655	7,953
Overseas vessels fumigated	16	7
Local vessels fumigated	75	50
Aircraft treated with aerosols	379	316
International Deratting Certificates	16	11
Deratting Exemption Certificates	1	3

27. The International Airport at Nadi, some 130 miles by road from the capital, handled the bulk of the air traffic. There is stationed there a Medical Officer of Health and a Health Inspector with Assistants, who carry out the general sanitary measures of this airport. Strict precautions are taken at Nadi and at Laucala Bay against the accidental introduction of malaria vectors by aircraft.

28. The Quarantine Islands of Nukulau and Makuluva, some ten miles from Suva, are maintained by the Department under permanent resident caretakers, supplied by regular visits of the quarantine launch from Suva.

HOSPITALS AND DISPENSARIES

29. <i>Disposition of Hospitals—</i>							<i>Beds</i>
Colonial War Memorial Hospital, Suva	..	..					275
Tamavua Tuberculosis Hospital, Suva..	..	..					300
Mental Hospital, Suva .. ..	..	..	..	..	..		100
Fiji Leprosy Hospital, Makogai..	..	..	..	..	..		750
District Hospitals—							
Lautoka .. .. .	..	..	..	..	..	..	150
Labasa .. .. .	..	..	..	..	..	..	50
Levuka .. .. .	..	..	..	..	..	..	24
Subsidized Hospitals—							
Methodist Mission Hospital, Ba .. ..	..	..	..				24
Nurse Morrison's Maternity Home, Suva .	..	..					8
Waiyevo Cottage Hospital, Taveuni .. ..	..	..					3
Private Hospital, Colonial Sugar Refining Company, Ba ..							6
Rural Hospitals—							
Wainibokasi .. .. .	..	..	..	..	..	..	45
Waiyevo, Taveuni .. .. .	..	..	..	..	..	..	40
Vunidawa .. .. .	..	..	..	..	..	..	28
Koromumu, Sigatoka .. .. .	..	..	..	..	..	..	27
Penang, Rakiraki, Ra .. .. .	..	..	..	..	..	..	25
Nadi .. .. .	..	..	..	..	..	..	25
Nailaga, Ba .. .. .	..	..	..	..	..	..	22
Savusavu .. .. .	..	..	..	..	..	..	20
Vunisea, Kadavu .. .. .	..	..	..	..	..	..	16
Lomaloma, Lau .. .. .	..	..	..	..	..	..	16
Nabouwalu, Bua .. .. .	..	..	..	..	..	..	14
Rotuma .. .. .	..	..	..	..	..	..	12
Lakeba, Lau .. .. .	..	..	..	..	..	..	8
Matuku .. .. .	..	..	..	..	..	..	6
Total number of beds available							1,994

See Appendix V for details of outpatients.

See Appendix VI for details of inpatients.

30. *Disposition of Urban and Rural Dispensaries—**In Suva—*

Suva Gaol

Samabula.

Tamavua Outpatient (General) Dispensary.

Southern District (under District Medical Officer, Nausori)—

Beqa Island

Nausori Clinic

Combined Schools, at Lodon

Navua

Korovou, Tailevu North

Nayavu

Lodon

Serua Island

Lomanikoro

Viria

Mokani

Yaro, Kadavu

Namosi.

Southern District (Lomaiviti sub-district)—

Gau

Koro

Kabara

Moala.

Western District (under District Medical Officer, Lautoka)—

Korolevuiwai

Natuatuacoko

Nadarivatu

Naviti, Yasawa.

Nadi Airport (administered from Suva)

Tau.

Namarai

Tavua

Nanukuloa

Vatukoula

Nasau

Vitogo (closed 1952/53).

Northern District (under District Medical Officer, Labasa)—

Dreketi

Visoqo

Lekutu

Wainikoro

Naduri

Wainunu

Udu.

Northern District (Taveuni sub-district)—

Kioa Island Community

Rabe Island Community

Natewa

Saqani

Total Rural Dispensaries—43.

See Appendix IV for details of outpatients.

FIJI LEPROSY HOSPITAL, MAKOGAI

31. Dr. C. J. Austin, C.B.E., M.B., Ch.B., the Medical Superintendent conducted a leprosy survey in the British Solomon Islands Protectorate from the 1st January to the 10th March, 1952, for which funds were provided by the South Pacific Commission.

The Fiji Regulations controlling the discharge of patients have been relaxed to the extent that one year of surveillance of inactive cases at Makogai is now regarded as sufficient, instead of the two years originally demanded by statute. This concession, considered to be justified by the success of modern drugs and by the rigid follow-up system under the Leprosy Registry, is however still to be regarded as experimental. A Medical circular, issued to all Medical Officers and Assistant Medical Practitioners in August 1952, pointed out that the reduction of the period of surveillance demanded increased care on the part of all concerned in the periodic examinations of discharged patients, and insisted that bacteriological as well as clinical tests should be applied in every case.

Dr. C. J. Austin, C.B.E., proceeded on preretirement leave in 1953. The loss of Dr. Austin's capable administration and specialist knowledge of leprosy has been keenly felt after 26 years in the Colony. During the 23 years which he had been Medical Superintendent much is also owed to Mrs. Austin for her whole-hearted contribution toward the congenial atmosphere prevailing at Makogai. During Dr. Austin's tenure of office he was ably assisted by the Rev. Mother Agnes, M.B.E., who retired after 36 years of outstanding administrative perception. The daily care of the patients is in the hands of the Sisters of Mary who so devotedly serve this cause. Dr. Austin was promoted to be a Commander in the Order of the British Empire in 1953 and the French Government has also awarded to Dr. Austin the *Medaille d'Or d'Epidémies* for outstanding medical services. The Rev. Mother Agnes, M.B.E., was the recipient of the Medal of the Legion of Honour, from the Government of France. This was presented by the Commander of the French Sloop *Tiare* which visited Fiji in 1953. Dr. W. H. Conran acted as Medical Superintendent for the period of the 2nd March to the 8th July, 1953. Dr. W. H. McDonald assumed duty on the 21st July, 1953.

The Fiji Leprosy Hospital on the island of Makogai is also available for patients from Western Samoa, Eastern (American) Samoa, the Cook Islands, Niue, Tonga, the Gilbert and Ellice Islands Colony and New Zealand. All active cases are compulsorily segregated on this island and discharge is controlled by strict criteria of inactivity. There is a carefully controlled follow-up of discharged patients, and the percentage of readmissions has been low.

The New Zealand and Fiji Lepers' Trust Boards—The New Zealand Lepers' Trust Board makes funds available annually for the treatment and comfort of leprosy patients in the various South and West Pacific Island Territories. In respect of the patients at Makogai the New Zealand Lepers' Trust Board, makes an annual allocation of funds which are dispensed by the Fiji Lepers' Trust Board which is a statutory body under the chairmanship of Sir Henry Scott, Q.C. The allocations to the Fiji Lepers' Trust Board amounted to £7,935 in 1951, £7,825 in 1952 and £4,408 in 1953. Bursaries have been provided to enable medical officers from the various territories to visit Makogai for study purposes. Bursaries were granted to a medical officer from Netherlands New Guinea on behalf of the South Pacific Commission, and a medical officer and Assistant Medical Practitioner from Western Samoa. A musical band has been formed recently, the instruments for which were purchased from funds provided by the Lepers' Trust Board. Outside school hours the children indulge in sport including cricket and football; the girls receive training in needlework and handicrafts. Through the courtesy of the welfare officer of the R.N.Z.A.F. squadron stationed in Fiji, a Boy Scout troop has been formed. Funds have been approved for the purchase of electrical therapy equipment to aid in the restoration of functions which have become impaired as a result of this disease. During the past three years a guest house was constructed for use by members of the New Zealand and Fiji Lepers' Trust Boards and doctors who come to Makogai to gain experience, and New Zealand visitors to Makogai. From the Board's funds the Sisters' quarters at Makogai were enlarged and improvements to the Leprosy Sub-station in Suva were effected. The Sub-Station is a transit unit where new patients are received pending confirmation of diagnosis and transfer to Makogai. A separate section of this unit is reserved for patients discharged from Makogai, awaiting transportation to their home territory. Many other amenities have been provided, not least of which is a building to accommodate a technical school with appropriate equipment for the training of young men in carpentry, joinery, automobile mechanics, electrical wiring, etc. This building will be opened in 1954.

The government of Fiji and New Zealand contribute annually to a building and replacement fund. The former electrical power supply has already been replaced by larger generators, and plans have been made for the improvement of the present water supply. With the assistance of a grant from United Kingdom Colonial Development and Welfare Fund, new quarters, including kitchen, for 100 Indian patients are nearing completion. Works scheduled to commence in 1954 include a new school for the children of labourers engaged in growing foodstuffs and other activities for the hospital and residential quarters for Assistant Medical Practitioners who receive training at Makogai as part of the medical curriculum of the Central Medical School.

A report in detail of the Central Leprosy Hospital at Makogai and the Leprosy Sub-Station at Korovou, Suva is contained in Appendices V (a) and V (b).

TUBERCULOSIS

32. The preliminary tuberculosis survey in Fiji which was commenced in 1950 was completed in 1953. Full use was made of the Colony's fixed and transportable mass miniature photofluoroscopic X-ray equipment together with Mantoux testing. The transportable X-ray equipment together with vehicles was a gift from the Fiji War Memorial Anti-Tuberculosis Trust Fund. Opportunity was taken during the survey to administer B.C.G. vaccine to negative reactors. A grant from the United Kingdom Colonial Development and Welfare Funds met the cost of the survey in Fiji and a grant is available for a tuberculosis survey in the Western Pacific High Commission territories which is to be undertaken in the British Solomon Islands Protectorate and the

Gilbert and Ellice Islands Colony during 1954 and 1955. Assistant Medical Practitioners specially trained in tuberculosis will conduct the survey in the Western Pacific High Commission territories. Dr. L. G. Poole, Tuberculosis Control Officer, Fiji, is available for consultations for these projects. Dr. Poole in 1950 and 1951 made an investigation of the problems associated with tuberculosis control in the above two territories. Assistant Medical Practitioner Peni Vuiyale who has been especially trained in this field undertook a preliminary survey of tuberculosis in the British Solomon Islands Protectorate in 1952.

A report in detail of the work undertaken at Tamavua Tuberculosis Hospital and the Tuberculosis Survey is contained in Appendix VI.

MENTAL HOSPITAL

33. Indian patients represent more than 50 per cent of the admissions to the Mental Hospital. The predominating disorders are Manic Depressive, Schizophrenia, Senile Dementia. The hospital is visited at quarterly intervals by a Board of Visitors. The Mental Hospital is located in Suva, and the daily average of patients is 115. Further details regarding the Mental Hospital are contained in Appendix VII.

LABORATORIES DIVISION

34. The Central Laboratory is associated with the Colonial War Memorial Hospital in Suva. Branch laboratories exist at Tamavua Tuberculosis Hospital and at Lautoka and Labasa General Hospitals. An average of five students are under training in laboratory techniques at the Central Laboratory. A course extends over a period of three years and qualifies these students as Laboratory Assistants, who undertake the procedures at the branch laboratories. They are supervised by regular visits from the Pathologist in charge of the Central Laboratory.

A detail report of the work undertaken in the laboratories division is contained in Appendix VIII.

TRAINING

35. *Central Medical School*—Dr. A. S. Frater, the Principal of the Central Medical School, resigned with effect from the 1st August, 1953, and Dr. T. A. Doran, Medical Officer in Charge of the Colonial War Memorial Hospital, was appointed to act as Principal until the completion of his agreement in 1954.

The Advisory Board consists of the Director of Medical Services, Fiji (who is also Inspector-General, South Pacific Health Service (Chairman)); the Director of Education, Fiji, the Secretary for Fijian Affairs; the Deputy Director of Medical Services, Fiji; the Medical Officer in Charge of the Colonial War Memorial Hospital, Suva; and the Principal. The Chief Secretary, Western Pacific High Commission, is also a member of the Board, but due to the transfer in December, 1952 of the headquarters of the Western Pacific High Commission to Honiara in the British Solomon Islands Protectorate, this officer's functions as a member of the board have been delegated by that Administration to the Inspector-General.

The Academic Board consisting of the Principal (Chairman), the Medical Officer in Charge of the Colonial War Memorial Hospital, the Physician Specialist, the Surgeon Specialist, the Medical Officer of Health and the Senior Dental Officer meets quarterly to keep the curriculum constantly under review and to assess the progress of the students.

Assistant Medical Practitioner is the designation given to a graduate in medicine from the Central Medical School. Dental graduates are Assistant Dental Practitioners. In the South Pacific Health Service territories these graduates do not engage in private practice but are full-time members of the medical staffs of the participating territories. Until 1949 the average total intake from all territories was 40 students. To supply replacements due to retirement, illness, additional dispensaries required for an increasing population and Assistant Medical Practitioners receiving post-graduate training in special fields of medicine, the enrolment was doubled in 1950 and again doubled in 1951. This together with the enrolment in 1951 of 37 medical and 29 dental students transferred from the Guam Medical School in the United States Trust Territory of the Pacific placed a considerable strain on the teaching and accommodation facilities pending the opening of the new Central Medical School building which will now be ready for occupancy next year.

The additional burden on the school was greatly alleviated by the High Commissioner of the United States Trust Territory of the Pacific seconding Dr. H. L. Cloud, Dental Educator to the school during 1951 and 1952. Dr. Cloud was relieved in 1953 by Dr. Earl Udick and Mrs. Udick both fully qualified dentists. These officers also served as Liaison Officers between the School and the United States Trust Territory. This valuable assistance is greatly appreciated and through their efforts a sound training in dentistry was ensured as a Senior Dental Officer Mr. D. M. Ellerton was not appointed to the Fiji establishment until June 1953.

During the visit of Her Majesty Queen Elizabeth II and His Royal Highness the Duke of Edinburgh to Fiji, the new Central Medical School building was officially opened by the Queen on the 17th December, 1953. The building is of reinforced concrete, three stories in the front and two stories in each wing. It contains offices, lecture rooms, laboratories, library, common room, recreation room, dining room, a modernly equipped kitchen and sleeping accommodation for approximately 150 students.

The Colonial War Memorial (general) Hospital (250 beds); the Tamavua Tuberculosis Hospital (300 beds); the Mental Hospital (100 beds) and the Central Leprosy Hospital, Makogai approximately 800 patients, provide ample clinical material for the students and full use is made of the colony's health departments, namely Tuberculosis, Leprosy, Yaws, Mosquito and Filariasis Control, Sanitary Engineering, School and Welfare Clinics, Nutrition and Quarantine services for training in preventive medicine, environmental hygiene and epidemiology.

A four year course in dentistry are also provided at the Central Medical School. Dental training and the dental services of the colony are under the direction of Mr. D. M. Ellerton, Senior Dental Officer, who is assisted by Ratu Vosailagi, Bachelor of Dental Surgery and Dr. E. W. Udick, Dental Surgeon on loan from the United States Trust Territory of the Pacific until 1954.

The following table shows the increase in the number of students enrolled during the past five years and the courses they pursued:—

					TABLE III				
Course					1949	1950	1951	1952	1953
Medical	..	..	..	..	42	76	124	129	173
Dental	..	..	..	..	1	2	23	30	23
Pharmacy	..	..	..	..	2	5	5	9	6
Sanitation	..	..	..	..	6	14	10	20	13
Laboratory	..	..	..	..	3	5	6	12	8
*Filariasis and Mosquito Control					13	16	14	21	9
X-ray	..	..	..	..	..	..	1	1	3
Total					67	118	183	222	235

* All sanitation students take this course as from 1953, although it may be taken independently if so requested by a territory.

36. *Medical Auxiliary Subjects*—Apart from medical and dental training, complete courses leading to a local certificate in the following technical subjects are available in conjunction with the Central Medical School and Fiji Medical and Health Departments:—

Pharmacy course	..	..	..	..	..	three years
Laboratory course	..	..	..	..	..	three years
Clinical Laboratory Assistant course	..	..	..	..	..	one year
Health (Sanitary) Inspector course	..	..	..	..	..	three years*
Filariasis (Mosquito Inspector) course	..	..	..	..	..	six months.

* The Sanitary Inspectors course includes training in malaria and filariasis control and the application of insecticides. Students from territories other than Fiji may complete the third year in the health department of their home territory.

37. *Post-graduate Courses*—Post-Graduate Courses associated with the Central Medical School. Special courses are available in tuberculosis (diagnosis, clinical, laboratory, X-ray, treatment, Mantoux testing and B.C.G. vaccination); leprosy (diagnosis, treatment, registration and follow-up); eye diseases; ante-natal and infant welfare work; obstetrics; school health; nutrition; port quarantine duties; filariasis and mosquito control. A programme has been instituted whereby selected Assistant Medical Practitioners in Fiji are returned to the school and hospitals for refresher courses in specific subjects.

A more complete report on the activities at the Central Medical School is contained in Appendix XII.

38. *Central Nurses Training School*—As part of the United Kingdom Colonial Development and Welfare scheme new buildings to accommodate the Central Nurses Training School were completed during 1953. These are located at Tamavua and will provide accommodation for 200 nurses.

Nurses' training is also provided at Lautoka and Labasa General Hospitals and at the Tamavua Tuberculosis Hospital. A course of training is also available for Indian girls at the Methodist Mission Hospital, Ba. The average number of nurses in training is 212 with an intake of new students of approximately 90 each year. An average of 25 nurses do not complete their training. The Central Nursing School at Suva also receives a few nurses from the Cook Islands, Western Samoa and Papua/New Guinea for either under graduate training or further training in ward administration, maternity and tuberculosis.

39. *Suva Medical Centre*—The new Central Medical School building opened in December, 1953 and those comprising the new Central Nurses' Training School and Hostel which will be ready for occupancy late in 1954 constitute part of the Medical Centre, located in Suva, Fiji. There still remain the new maternity and out-patients departments to be constructed as an extension of these facilities at the Colonial War Memorial Hospital in Suva. Funds to cover the cost of the expansion of these and treatment institutions are a gift from the Government of Great Britain as part of its Colonial Welfare and Development Scheme.

The capacity of the Tuberculosis Hospital will be increased from 300 to 325 beds in 1954. Chest surgery for the treatment of tuberculosis in selected cases became routine during the period under review.

In 1953 some of the Medical Schools in England agreed to recognize the facilities available at the Colonial War Memorial Hospital, as meeting the requirements for the compulsory year of hospital training prior to medical registration. The Medical Council of New Zealand is also considering the granting of similar recognition. This may lead to applications being received for appointment as resident housemen from students in the United Kingdom and New Zealand and in particular from medical students from Fiji who are attending medical schools in these two countries.

CENTRAL MEDICAL RESEARCH LIBRARY

40. This library was made possible by a grant of £4,051 in 1949 from the United Kingdom Colonial Development and Welfare Fund. A representative collection of text and reference books on medicine, health, research and allied subjects has been acquired; approximately 50 periodicals are received annually.

A mimeograph and micro-film projector have been added to the equipment. The library facilities are available to private practitioners, medical officers, health department staff and students. A full report of the library activities is contained in Appendix XIII.

METEOROLOGY

41. Summaries of Meteorological observations for 1952 and 1953 are given at Appendix XIV. For these I am indebted to the Meteorological Officer at Laucala Bay, Suva.

J. M. CRUIKSHANK,
Director of Medical Services.

APPENDIX

DEPARTMENTAL ESTABLISHMENT

	1952	1953
1. MEDICAL AND ADMINISTRATIVE SECTION—		
Director of Medical Services	1	1
Deputy Director of Medical Services	1	1
Assistant Director (Health and Medical)	1	1
Secretary	1	1
Senior Medical Officers	3	3
Physician Specialist	1	1
Surgeon Specialist	1	1
Medical Officers	18	18
Ophthalmologist	1	1
Radiologist	1	1
Dental Surgeons	2	2
Pathologist	1	1
Assistant Medical Practitioners	96	96
Assistant Dental Practitioners	2	2
2. NURSING SECTION—		
Nursing Superintendent	1	1
Matrons and Assistant Matrons	5	5
Nursing Sisters	46	49
Health Sisters	11	11
Principal (1) Tutors (6) Nursing School	7	7
Assistant Nurses	294	319
3. TECHNICAL SECTION—		
Laboratory Superintendent	1	1
Laboratory Assistants	8	8
Chief Health Inspector	1	1
Health Instructor	1	1
Health Inspectors (10) Assistant Inspectors (23)	33	33
Government Pharmacists (3) Assistants (4)	7	7
Radiographers (2) X-ray Assistants (2)	4	4
Dietitians	3	3
Dental Mechanic	1	1
4. CLERICAL SECTION—		
Clerical Staff	35	35
5. SUPERVISORY SECTION—		
Mental Hospital, Attendants	2	2
Caretaker, Quarantine Island	1	1
Carpenters (3) Engineers (3) Storekeepers (2)	8	8
Occupational Instructor	1	1
Housekeepers (3) Laundry (2) Seamstress (1)	6	6
Subordinate Staff	107	111
6. CENTRAL MEDICAL SCHOOL—		
Principal (1) Assistant Principal (1)	2	2
Dental Officer (1) Dental Mechanic (1)	2	2
Science Lecturer	1	1
Housekeeper (1) Clerical staff (1) Servants (6)	8	8
7. FIJI LEPROSY HOSPITAL—		
Medical Officer	1	1
Clerical Staff	2	2
Overseer (1) School teachers (2) Constables (4)	7	7
Bakers (4) Headman and Women (10) Servants (20)	34	34
Nursing Sisters	28	31
8. MALARIA PREVENTION AND FILARIASIS CONTROL—		
Surveyor in Charge	1	1
Supervisor	1	1
Senior Inspectors (4) Inspectors (19) Assistants (45)	68	68
Clerical Staff (2) Pupils (6)	8	8

APPENDIX II

NOTIFICATION OF INFECTIOUS DISEASES BY DISTRICTS FOR THE YEARS—1952 AND 1953.

Name of Disease	Suva		Southern		Western		Eastern		Northern		Rotuma		Total	
	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
A. Poliomyelitis	2	..	1	..	5	1	..	..	..	..	..	..	8	1
Cerebro-Spinal Meningitis	8	..	4	2	9	6	2	1	4	6	..	..	27	15
Chicken pox (Varicella) ..	5	20	16	15	21	68	12	6	17	21	13	..	84	130
Amoebic Dysentery	9	..	1	4	7	10	1	2	8	1	..	..	26	17
Bacillary Dysentery	29	6	45	30	77	107	5	2	46	15	5	1	207	161
Unclassified Dysentery ..	..	2	6	2	52	74	1	1	..	2	1	1	60	82
Influenza	6	1,032	776	420	2,675	852	524	383	640	416	157	76	4,778	3,179
Measles (Morbilli) . . .	..	..	..	1	7	8	..	1	..	2	..	..	7	12
Measles (German) . . .	..	..	..	..	1	..	..	..	..	1	..	..	1	1
Mumps .. .. .	..	1	..	2	..	1	..	4	..	..	..	..	..	8
Typhoid Fever	16	5	14	6	15	6	2	2	21	13	..	..	68	32
Paratyphoid Fever	5	1	6	..	1	2	..	..	2	..	..	..	14	3
Whooping Cough .. .	11	18	55	6	142	51	73	157	107	13	385	..	773	245
Anthrax . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beriberi	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Dengue Fever	1	..	14	9	27	50	93	..	..	1	..	..	135	60
Diphtheria	5	1	3	..	4	6	..	..	1	..	..	..	13	7
Encephalitis .. .. .	..	1	..	1	..	1	..	..	..	..	..	..	..	3
Erysipelas .. .. .	..	..	..	..	2	4	..	..	..	..	..	..	2	4
Infantile Diarrhoea .. .	1	110	220	714	169	634	92	120	121	553	147	66	750	2,197
Infective Hepatitis .. .	4	6	8	6	6	12	20	2	3	3	..	..	41	29
Leprosy	3	7	9	2	14	19	3	11	1	1	3	..	33	40
Leptospirosis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	3	..	1	..	1	1	..	..	1	..	..	..	6	1
Puerperal Fever	1	..	2	2	12	18	..	..	7	11	..	..	22	31
Scarlet Fever .. .. .	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Tetanus	4	..	4	7	21	21	3	1	6	4	..	..	38	33
Trachoma . . . . .	..	..	18	6	20	23	5	2	5	2	..	..	48	33
Tuberculosis pulmonary ..	178	191	67	70	103	121	18	21	28	39	12	3	406	445
Tuberculosis other	10	3	8	23	13	14	8	4	8	9	..	..	47	53
Undulant Fever	2	..	..	..	2	..	..	..	..	..	..	..	4	..
Climatic Bubo .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gonorrhoea	90	91	11	19	89	81	7	18	12	11	..	..	209	220
Ophthalmia Neonatorum ..	2	..	2	..	..	..	1	2	..	..	..	..	5	2
Soft Chancre	2	..	1	..	..	..	..	..	..	..	..	..	3	..
Syphilis	16	17	1	4	3	..	..	..	..	1	1	..	21	22
Venereal Granuloma .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Venereal others .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ankylostomiasis	33	4	56	101	32	72	1	..	..	2	..	..	122	181
Conjunctivitis .. .. .	..	..	1	..	..	..	..	..	1	9	..	..	2	9

All Malaria cases were imported, that is, in soldiers returning from Malaya, or in individuals who formerly resided in Malarial areas. Anopheline mosquitos have not been discovered in Fiji.

NOTIFICATION OF INFECTIOUS DISEASES BY RACE FOR THE YEARS 1952 AND 1953.

Disease	Europeans		Part-Europ.		Fijians		Indians		Others		Totals	
	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
Acute Ant. Poliomyelitis	2	..	1	..	..	..	5	1	..	..	8	1
Cerebro-Sp. Meningitis .. ..	..	..	..	..	13	10	10	5	4	..	27	15
Chicken pox (Varicella) .. ..	..	9	7	4	51	67	8	48	18	2	84	130
Amoebic Dysentery	5	..	..	..	7	7	14	10	..	..	26	17
Bacillary Dysentery .. ..	..	3	5	4	64	62	127	91	11	1	207	161
Unclassified Dysentery	2	..	1	..	17	18	39	63	1	1	60	82
Influenza	121	101	82	86	2,365	1,811	2,000	1,000	210	181	4,778	3,179
Measles (Morbilli)	6	9	1	..	..	1	..	2	..	..	7	12
Measles (German)	1	..	..	..	..	1	..	..	..	..	1	1
Mumps .. ..	..	..	..	..	..	4	..	2	..	2	..	8
Typhoid Fever	4	2	4	2	27	18	33	10	..	..	68	32
Paratyphoid Fever .. ..	..	..	2	..	4	2	8	1	..	..	14	3
Whooping Cough	11	2	11	6	263	198	101	35	387	4	773	245
Anthrax .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Beriberi .. ..	..	..	..	..	..	..	1	..	..	..	1	..
Dengue Fever	9	8	2	1	116	18	7	32	1	1	135	60
Diphtheria	1	..	..	..	3	1	9	6	..	..	13	7
Encephalitis .. ..	..	..	..	..	..	..	..	3	..	..	..	3
Erysipelas .. ..	..	1	..	..	..	1	2	2	..	..	2	4
Infantile Diarrhoea	1	16	19	43	455	1,561	119	444	156	133	750	2,197
Infective Hepatitis	2	..	4	..	13	14	19	14	3	1	41	29
Leprosy .. ..	..	..	..	..	17	22	10	15	6	3	33	40
Leptospirosis .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	3	..	..	..	3	1	..	..	..	..	6	1
Puerperal Fever .. ..	..	..	..	..	6	9	16	22	..	..	22	31
Scarlet Fever .. ..	..	1	..	..	..	..	..	..	..	..	..	1
Tetanus .. ..	..	..	2	..	16	17	18	16	2	..	38	33
Trachoma .. ..	..	..	2	..	42	30	2	2	2	1	48	33
Tuberculosis Pulmonary	3	11	9	7	301	359	95	93	45	28	453	498
Undulant Fever .. ..	..	..	..	..	3	..	1	..	..	..	4	..
Gonorrhoea	17	23	11	9	82	117	93	64	6	7	209	220
Ophthalmia Neonatorum .. ..	..	..	..	..	2	2	2	..	1	..	5	2
Soft Chancre .. ..	..	..	..	..	..	..	3	..	..	..	3	..
Syphilis .. ..	..	..	4	..	3	..	14	20	..	2	21	23
Venereal Granuloma .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Conjunctivitis .. ..	..	..	..	..	2	..	..	..	..	9	2	9
Ankylostomiasis .. ..	..	..	..	1	47	48	75	130	..	..	122	181
Totals	188	186	167	163	3,922	4,400	2,832	2,131	852	378	7,961	7,257

NOTIFICATION OF INFECTIOUS DISEASES BY MONTHS FOR THE YEARS 1952 AND 1953

Disease	January		February		March		April		May		June		July		August		September		October		November		December		Total	
	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
Ac. Ant. Poliomyelitis
Cer.-Sp. Meningitis
Chicken-pox
Am. Dysentery
Bac. Dysentery
Unklass. Dysentery
Influenza	1,125	251	1,499	336	407	281	235	378	300	221	130	171	209	297	297	294	196	290	155	221	224	215	224	4,778	3,179	..
Measles
Measles German
Mumps
Typhoid Fever
Paratyphoid
Whooping Cough
Anthrax
Beriberi
Dengue Fever
Diphtheria
Encephalitis
Erysipelas
Infant. Diarrhoea
Infect. Hepatitis
Leprosy
Leptospirosis
Malaria
Puerperal Fever
Scarlet Fever
Tetanus
Trachoma
Tuberculosis Pulm.
Tuberculosis Other
Undulant Fever
Gonorrhoea
Ophthalmia Neonat.
Soft Chancre
Syphilis
Vener. Granuloma
Ankylostomiasis
Conjunctivitis
Total	1,326	423	1,759	592	636	643	616	649	994	461	376	504	535	1,226	486	980	351	571	372	444	205	374	390	305	7,961	7,257

APPENDIX III

VITAL STATISTICS

ESTIMATED POPULATION 1951-1953

	1950		1951				1952					1953				
	Total	Male	Female	Total	Diff.	%	Male	Female	Total	Diff.	%	Male	Female	Total	Diff.	%
Fijians	129,896	67,506	65,383	132,888	+ 2,993	2.3	69,030	66,847	135,877	+ 2,988	2.3	70,758	68,615	139,373	+ 3,496	2.6
Indians	138,425	76,258	76,574	143,332	+ 4,907	3.5	78,962	69,840	148,802	+ 5,470	3.8	81,910	72,893	154,803	+ 6,001	4.0
Europeans . .	6,501	3,560	2,667	6,227	- 274	4.2	4,538	3,442	7,980	+ 1,753	2.8	3,468	3,032	6,500	- 1,380	17.3
Euronesians ..	6,902	3,660	3,423	7,083	+ 181	2.6	3,783	3,515	7,298	+ 215	3.0	3,885	3,611	7,496	198	2.7
Rotumans.. ..	3,669	1,942	1,851	3,793	+ 124	3.4	1,955	1,890	3,845	+ 52	1.4	2,031	1,959	3,990	+ 145	3.8
Polynesians ..	4,340	2,638	1,762	4,400	+ 60	1.4	2,673	1,825	4,498	+ 98	2.2	2,390	1,743	4,133	- 365	8.2
Chinese	3,379	2,476	1,105	3,581	+ 202	6.0	2,540	1,179	3,719	+ 138	4.0	2,607	1,250	3,857	+ 138	3.7
Others	652	350	304	654	+ 2	0.3	355	304	659	+ 4	0.6	348	301	649	- 10	1.5
Totals	293,764	158,390	153,069	301,959	+ 8,195	2.8	163,836	148,842	312,678	+ 10,719	3.5	167,397	153,404	320,801	+ 8,123	2.6

THE NUMBER OF BIRTHS RECORDED DURING THE YEARS 1950-1953.

Race				1950	1951	1952	1953	Crude birth-rate per Mille, 1953
Fijians .. ..	..	..	..	4,821	4,575	4,983	4,903	35
Indians .. ..	..	..	..	5,882	6,056	6,650	7,133	46
Europeans ..	..	..	..	131	108	113	139	21
Euronesian ..	..	..	..	232	239	257	243	32
Rotumans ..	..	..	..	150	185	171	194	48
Polynesians .	..	..	..	161	143	185	169	40
Chinese .. ..	..	..	..	137	134	139	148	38
Others .. ..	..	..	..	3	1	14	7	10
Total .. ..	..	..	..	11,517	11,441	12,512	12,936	40

THE NUMBER OF DEATHS RECORDED DURING THE YEARS 1950-1953.

Race				1950	1951	1952	1953	Crude death-rate per Mille, 1953
Fijians .. ..	..	..	..	1,599	1,659	2,004	1,478	11
Indians .. ..	..	..	..	1,383	1,252	1,325	1,257	8
Europeans ..	..	..	..	32	33	35	20	3
Euronesians .	..	..	..	42	58	42	45	6
Rotumans ..	..	..	..	68	61	119	49	10
Polynesians .	..	..	..	81	69	58	48	11
Chinese .. ..	..	..	..	24	18	18	28	7
Others .. ..	..	..	..	1	.....	5	1	1
Total .. ..	..	..	..	3,230	3,150	3,606	2,926	9

MARRIAGES, BIRTHS, DEATHS AND NATURAL INCREASE

1952

Race	Marriages	Births	Deaths	Increase	Population 1951	Increase per Mille.
Fijians	871	4,983	2,004	2,979	132,889	22
Indians	1,164	6,650	1,325	5,325	143,332	37
Europeans . . .	34	113	35	78	6,227	13
Euronesians ..	50	257	42	215	7,083	30
Rotumans.. ..	27	171	119	52	3,793	14
Polynesians ..	29	185	58	127	4,400	29
Chinese	17	139	18	121	3,581	34
Others .. ..	....	14	5	9	654	14

1953

Totals ..	2,192	12,512	3,606	8,906	301,959	29
					Population 1942	
Fijians	902	4,903	1,478	3,425	135,877	25
Indians	1,303	7,133	1,257	5,876	148,802	39
Europeans . . .	48	139	20	119	7,980	15
Euronesians ..	31	243	45	198	7,298	27
Rotumans.. ..	14	194	49	145	2,845	38
Polynesians ..	33	169	48	121	4,498	27
Chinese	13	143	28	120	3,719	32
Others	3	7	1	6	659	9
Totals ..	2,347	12,936	2,926	9,010	312,678	29

INFANT AND CHILD MORTALITY

	Births	DEATHS						Infant Mortality Rate per Mille
		Under 1	1-2	2-3	3-4	4-5	Total	
1952—Fijians	4,983	394	237	79	34	31	775	79
Indians	6,650	341	45	19	13	10	428	51
1953—Fijians	4,903	293	138	40	20	14	505	60
Indians	7,133	341	28	13	9	9	400	48

APPENDIX IV

The following tables show the analysis of Inpatients and Out patients for the years 1952 and 1953.

GENERAL AND RURAL HOSPITALS ADMISSIONS RACIAL DISTRIBUTION

Race	C.W.M. Hospital		Lautoka		Levuka		Labasa		Tamavua		Total	
	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
Fijians	2,103	1,604	902	472	387	344	276	271	206	253	3,874	2,944
Indians	2,224	1,691	2,465	1,501	72	53	1,668	1,574	48	67	6,477	4,886
Europeans and Euronesians ..	341	445	277	165	8	81	48	85	....	15	674	791
Chinese and Others	455	176	201	225	87	72	40	26	41	25	814	524
Total ..	5,113	3,916	3,845	2,363	554	550	2,032	1,956	295	360	11,839	9,145

OUTPATIENTS THROUGHOUT THE COLONY

Race	C.W.M. Hospital		Tamavua		3 District Hospitals		14 Rural Hospitals		Rural Dispensaries		Totals	
	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
Fijians	22,184	22,546	1,005	1,349	13,919	15,734	58,786	59,099	123,105	135,556	217,999	234,284
Indians	29,132	21,429	630	297	23,665	27,461	37,875	39,606	38,435	39,456	129,737	128,249
Europeans, etc. ..	720	1,347	....	....	1,033	976	1,545	1,268	5,929	3,527	9,227	7,118
Chinese, others ..	3,955	3,676	340	51	4,477	5,213	2,042	3,541	8,947	9,554	19,761	22,035
Totals ..	54,991	48,998	1,975	1,697	43,094	49,384	100,248	103,514	176,416	188,093	376,724	391,686

GENERAL AND RURAL HOSPITALS: ADMISSIONS

Hospitals	Occupied Beds					
	Beds		Daily Average		Admissions	
	1952	1953	1952	1953	1952	1953
C.W.M. Hospital, Suva ..	275	275	213	225	5,113	3,916
Tamavua	256	261	247	252	295	360
Three District Hospitals .	210	225	180	196	6,431	4,859
Fourteen Rural Hospitals ..	365	365	272	281	7,754	7,928
Totals ..	1,106	1,126	912	954	19,593	17,063

COLONIAL WAR MEMORIAL HOSPITAL OUTPATIENTS—SUVA AREA

	Fijians		Indians		Europeans etc.		Others		Totals	
	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
European M.O. ..	358	496	583	634	663	274	301	254	1,905	1,658
Dental Department ..	2,638	2,373	3,918	3,605	(a)	1,062	1,544	363	8,100	7,403
Eye Department .	764	965	773	1,053	(a)	(a)	261	449	1,798	2,467
A.M.P. Casualty Dept. ..	17,424	18,712	23,858	16,137	57	10	1,849	1,611	43,188	37,470
Totals ..	21,184	22,546	29,132	21,429	720	1,346	3,955	3,676	54,991	48,998

APPENDIX V (a)

FIJI LEPROSY HOSPITAL, MAKOGAI—STATISTICS

The average daily number of patients at Makogai during 1952 were 690·7, of which 400·5 (excluding Banabans, who are now admitted as from Rabe Island) represented patients within the Colony of Fiji. This is the lowest figure for Fiji patients since 1938, and represents 57·9 per cent of the total number of patients. The corresponding figures for 1953 are 686·07 patients, of which 399·10 (excluding Banabans) represented patients from Fiji. The daily average for the different administrations is set out in table form. The above figures indicate that approximately 53 per cent of the Fiji expenditure on Makogai is reimbursed by other administrations—those of New Zealand, Tonga, Cook, Gilbert and Niue Islands. (See table I—1952 and Table I—1953.)

DAILY AVERAGE FOR THE DIFFERENT ADMINISTRATIONS

NEW ZEALAND—				1952	1953
European..	..	..		1·00	0·54
Chinese	..	..		0·46	1·00
Samoan	..	..		1·00	0·34
Niue	..	..		1·00	1·00
				3·46	2·88
WESTERN SAMOA—					
Euronesian	..	..		9·53	8·36
Chinese	..	..		1·00	1·00
Melanesian	..	..		1·00	0·36
Samoan	..	..		60·78	59·58
				72·31	69·30
AMERICAN SAMOA—					
Euronesian	..	..		3·00	2·24
Samoan	..	..		26·67	16·57
				29·67	18·81
COOK ISLANDS—					
Euronesian	..	..		0·96	....
Cook Islanders	..	..		55·86	48·84
Niue Islanders	..	..		5·00	5·00
				61·82	53·84
TONGAN—					
Tongan	..	..		32·07	32·78
				32·07	32·78
GILBERT ISLANDS—					
European..	..	..		1·00	1·00
Euronesian	..	..		2·00	2·41
Chinese	..	..		1·00	1·00
Gilbert Islanders	..	..		76·27	92·58
				80·27	96·99
FIJI—					
European..	..	..		1·00	1·00
Euronesian	..	..		4·90	5·00
Chinese	..	..		3·00	3·87
Melanesian	..	..		20·90	21·71
Rotuman	..	..		10·36	12·64
Samoan	..	..		1·00	1·00
Banaban	..	..		10·60	12·37
Indian	..	..		227·05	224·56
Fijian	..	..		132·29	129·32
				411·10	411·47
				690·70	686·07

TABLE 1.

STATISTICS FOR THE YEAR 1952

	Euro- pean		Euro- nesian		Solomon Islander		Fijian		Indian		Chinese		Rotu- man		Samoan		Niue Islander		Cook Islander		Tongan		Gilbert Islander		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
In Hospital 1/1/52	2	1	14	6	13	8	78	56	173	54	5	..	6	4	56	34	5	3	39	20	21	12	46	33	456	231
Admissions	..	..	1	..	3	3	5	5	18	7	1	..	2	..	..	..	..	..	..	..	..	..	8	47	23	687
Deaths	..	..	..	..	..	..	1	2	6	1	..	..	1	..	1	..	..	..	..	..	..	..	1	9	4	13
Discharges	..	..	..	..	1	2	8	7	17	4	..	..	..	..	2	2	..	..	5	2	2	..	2	1	39	18
In Hospital, 31/12/52	2	1	13	6	12	9	74	52	168	56	6	..	7	4	53	32	3	3	34	18	19	12	64	39	455	232
Totals	3	..	19	..	21	..	126	..	224	..	6	..	11	..	85	..	6	..	52	..	31	..	103	..	687	..

TABLE 1

STATISTICS FOR THE YEAR, 1953

	Euro- pean		Euro- nesian		Solomon Islanders		Fijian		Indian		Chinese		Rotuma		Samoan		Niue Islanders		Cook Islanders		Tongan		Bana- ban		Gilbert Islanders		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
In Hospital 1/1/53	2	1	13	7	12	9	74	52	168	56	6	..	7	4	53	32	3	34	18	19	12	10	3	54	35	455	232	687
Admissions	..	..	..	..	2	2	23	6	21	7	1	..	1	2	6	2	..	3	4	4	1	..	..	11	9	71	33	104
Deaths	..	..	..	..	..	..	3	1	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	9	2	11
Conditional Discharges	1	..	1	..	..	..	8	9	16	4	..	..	..	..	9	2	..	12	6	4	3	..	..	1	4	55	28	83
Uncond. Discharges	..	..	..	1	..	..	..	1	..	2	..	..	..	..	..	9	..	..	..	..	..	..	..	1	..	1	3	4
Repatriated	..	..	2	..	..	..	..	..	..	..	..	..	..	..	13	..	..	..	..	..	..	..	..	..	..	15	10	25
Absent. without leave	..	..	..	..	1	..	2	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	5	..	5
Inmates—31/12/53	1	1	10	6	11	11	84	47	168	57	7	..	8	6	35	23	3	25	16	19	10	8	3	62	39	441	222	663
Totals	2	..	16	..	22	..	131	..	225	..	7	..	14	..	58	..	6	41	41	29	..	11	..	101	..	663	..	..

The following percentages show the relative proportions of the main racial groups of patients.

	1952	1953
Indians	32	34
Fijians	18	20
Gilbert Islands (including Banabans) ..	15	17
Samoans	12	9
Cook Islands	7	6

All patients from American Samoa—25 in number, were repatriated in September 1953 to continue treatment under their own Administration. One Western Samoa patient “ stowed away ” on the same vessel.

The other four “ absentees without leave ” shown on Table I 1953, were the last of 11 patients who had not returned after taking leave of absence to see H.M. the Queen and the Duke of Edinburgh when they visited Suva in December. It is perhaps a comment on conditions in Makogai that these patients were fit enough to sail to the main Island in small boats in order to satisfy their loyal ambitions, leaving behind them letters indicating their intention to return speedily when they had seen their Sovereign.

TYPES OF LEPROSY ENCOUNTERED

The 704 patients classified in Table II and III 1952, and 746 in Table II and III 1953, include those who died or were discharged before the end of the year, but does not include the admissions during the last five months of the year, as it was felt that they would merely confuse the progress figures. See Tables II and III 1952, and Tables II and III 1953.

TABLE II—1952

			T-1		T-2		T-3		L-1		L-2		L-3		Totals		
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
European .. ..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	2		
Euronesian . . .	..	..	1	..	1	1	..	1	3	3	11	2	..	..	16	7	23
Fijian .. .. .	..	..	3	2	16	32	5	4	22	9	23	12	8	..	77	59	136
Solomon Islanders ..	..	..	..	2	5	3	2	..	3	1	2	1	2	3	14	10	24
Samoan .. .. .	..	..	2	2	16	2	..	1	11	10	25	18	2	1	56	34	90
Rotuman .. .. .	..	..	1	..	1	..	..	..	1	2	5	2	..	..	8	4	12
Cook Islanders ..	..	..	10	6	8	3	1	..	9	2	10	9	1	..	39	20	59
Niue Islanders ..	..	..	1	1	..	..	..	..	1	1	..	1	1	..	3	3	6
Gilbert Islanders ..	..	..	3	5	3	..	1	..	8	10	24	17	5	..	44	32	76
Tongan .. .. .	..	..	1	1	4	4	5	2	6	3	5	2	..	..	21	12	33
Chinese .. .. .	..	..	1	..	1	..	..	..	1	..	3	..	..	..	6	..	6
Indian .. .. .	..	..	17	6	31	6	..	1	57	15	72	28	3	1	180	57	237
Totals ..	..	..	40	25	86	51	14	9	123	57	180	92	22	5	465	239	704
			65		137		23		180		272		27		704		
			225						479								

TABLE II—1953

			T-1		T-2		T-3		L-1		L-2		L-3		Totals				
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
European	..	..	1	..	..	..	..	..	1	1	..	..	..	..	2	1	3
Euronesian	.	..	..	..	..	1	..	1	3	2	10	3	..	..	13	7	20
Fijian	..	..	2	2	14	28	4	3	22	9	32	13	10	..	84	55	139
Solomon Islanders	..	..	2	3	4	1	2	..	3	1	2	2	2	3	15	10	25
Samoan	..	..	3	2	16	2	..	1	13	11	25	17	2	1	59	34	93
Rotuman	..	..	1	..	..	..	..	..	1	3	5	2	..	1	7	6	13
Cook Islanders	..	..	11	5	4	4	..	..	9	4	12	9	1	..	37	22	59
Niue Islanders	..	..	1	1	..	..	..	..	1	1	..	1	1	..	3	3	6
Gilbert Islanders	..	..	8	5	8	4	2	..	10	11	36	21	5	..	69	41	110
Tongan	..	..	2	1	4	5	5	1	6	3	6	3	..	..	23	13	36
Chinese	..	..	..	..	2	..	..	..	1	..	4	..	..	..	7	..	7
Indian	..	..	21	6	24	6	..	2	57	17	74	26	2	..	178	57	235
Totals			52	25	76	51	13	8	127	63	206	97	23	5	497	249	746		
			77		127		21		190		303		28		746				
			225								521								

Lepromatous—		1952	1953
Gilbert Islanders ..	..	75 per cent	84·2 per cent
Indians ..	..	75 per cent	74·3 per cent
Samoans ..	..	74 per cent	74·4 per cent
Fijians ..	..	62 per cent	54·4 per cent
Cook Islanders ..	..	59 per cent	52·5 per cent
Totals ..	..	70 per cent	68 per cent
Males .	..	74 per cent	70 per cent
Females ..	..	76 per cent	64 per cent

For 1952 the Progress Table shows a total of improvement (including those classified as “ Arrested ”, “ Quiescent ” and “ Improved ”) of 71 per cent—(73·5 per cent of the males and 66·1 per cent of the females). Racial variations are:—

PROGRESS TABLE III—1952

	Arres- ted		Quie- scent		Im- proved		Station- ary		Worse		Died		Totals			
	M.	F.	M.	F.	M.	M.	M.	F.	M.	F.	M.	F.	M.	F.		
European .. ..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	2
Euronesian . . .	2	..	2	..	7	5	5	..	..	2	..	..	16	7	23
Fijian	12	11	9	17	37	9	12	16	6	4	1	2	77	59	136	
Solomon Islanders..	5	3	3	..	6	5	..	2	..	..	..	..	14	10	24
Samoan	3	3	16	1	21	14	13	13	2	3	1	..	56	34	90	
Rotuman .. ..	..	..	..	..	1	3	6	1	..	..	1	..	8	4	12
Cook Islanders ..	6	2	17	7	7	6	8	4	1	1	..	..	39	20	59
Niue Islanders ..	..	..	1	..	1	1	1	2	..	..	..	..	3	3	6
Gilbert Islanders ..	2	1	6	8	23	12	13	7	..	3	..	1	44	32	76	
Tongan	5	2	4	6	8	4	2	..	2	..	..	..	21	12	33
Chinese .. ..	..	..	..	..	3	..	3	..	..	..	..	..	6	..	6
Indian	17	5	32	9	85	23	33	14	7	5	6	1	180	57	257	
Totals ..	52	27	90	48	200	83	96	59	18	18	9	4	465	239	704	
	79		138		283		155		36		13		704			
	500						204									

Cook Islanders .	..	..	..	..	76·3 per cent
Indians .	..	..	..	..	72·1 per cent
Fijians ..	..	..	..	..	69·8 per cent
Gilbert Islanders	..	..	..	..	68·4 per cent
Samoans	..	..	..	..	64·4 per cent

For 1953 280 of 746 patients are recorded this year as “ Stationary ” as compared with 155 of 704 patients in 1952. The great majority of those 155 had already shown sufficient improvement to be up-graded. Whether this increased proportion of “ Stationary ” cases is due to any improvement now becoming so gradual that the progress over a period of 12 months is not noticeable, or due to the fact that the bacilli are becoming “ sulphone-fast ” demands further observation and investigation.

PROGRESS TABLE III—1953

	Arres- ted		Quie- scent		Im- proved		Station- ary		Worse		Died		Totals			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
European	1	..	..	..	1	..	..	1	..	..	..	..	2	1	3
Euronesian . . .	1	..	2	..	5	4	5	2	..	1	..	..	13	7	20
Fijian	11	12	3	9	16	8	42	23	9	2	3	1	84	55	139	
Solomon Islanders..	4	1	..	1	3	4	6	4	2	..	..	..	15	10	25
Samoan	13	2	2	3	12	10	25	16	6	3	1	..	59	34	93	
Cook Islanders ..	14	7	3	1	9	7	10	7	1	..	..	..	37	22	59
Rotuman .. ..	..	..	..	..	4	5	3	1	..	..	..	..	7	6	13
Niue Islanders ..	..	..	1	1	2	1	..	1	..	..	..	..	3	3	6
Gilbert Islanders ..	5	6	1	2	28	16	30	6	4	10	1	1	69	41	110	
Tongan	4	5	3	1	6	3	7	2	3	2	..	..	23	13	36
Chinese .. ..	..	..	1	..	4	..	2	..	..	..	..	..	7	..	7
Indian	23	8	17	5	57	20	69	18	8	6	4	..	178	57	235	
Totals ..	76	41	33	23	147	78	199	81	33	24	9	2	497	249	746	
	117		56		225		280		57		11		746			
	398								348							

Total—Arrested, Quiescent and Improved—					
Males .	..	..	..	..	52 per cent
Females	..	..	..	..	57 per cent
Gilbert Islanders	.	..	..	..	53 per cent
Indians	..	..	..	..	55 per cent
Samoans	..	..	..	..	45 per cent
Fijians	..	..	..	..	42 per cent
Cook Islanders	..	..	..	..	69 per cent

TABLE IV—1952

				T-1	T-2	T-3	L-1	L-2	L-3	Totals
Arrested	..	..	..	4	49	10	1	15	....	79
Quiescent	..	..	..	42	57	6	32	1	..	138
Improved	..	..	..	7	9	3	100	144	20	283
Stationary	..	..	..	9	14	1	29	99	3	155
Worse	..	..	..	2	5	2	17	8	2	36
Died	..	..	..	1	3	1	1	5	2	13
Totals	..			65	137	23	280	272	27	704

TABLE IV—1953

				T-1	T-2	T-3	L-1	L-2	L-3	Totals
Arrested	..	..	..	38	53	7	19	..	..	117
Quiescent	..	..	..	12	14	4	24	2	..	56
Improved	..	..	..	9	17	1	66	120	12	225
Stationary	..	..	..	15	31	6	65	153	10	280
Worse	..	..	..	2	10	3	13	24	5	57
Died	..	..	..	1	2	..	2	5	1	11
Totals	..			77	127	21	189	304	28	746

ADMISSIONS

The 69 admissions during the year included 38 patients from Fiji itself, and 31 from beyond the Colony, but two of the Gilbert Island admissions were, more strictly, Banabans admitted from Rabe Island in Fiji, which they purchased a few years ago.

It is noteworthy that the sex ratio of two males to one female holds exactly with regard to these admissions, as well as, approximately, with regard to the discharges, deaths, and the total number of patients. Unfortunately the same ratio does not apply to the stage of disease, for only one of the ten early Tuberculoid cases was a female, and none of the four early Lepromatous cases. It is evident then, that a much higher proportion of females than males is being admitted in the more advanced stages of the disease.

Including the one Gilbert Islander immediately discharged as wrongly diagnosed, the total of admissions is seen to be exactly equal to the total of discharges and deaths, so that the year ended, as it began, with 687 patients at Makogai.

TABLE V—ADMISSIONS—1952

				Tuberculoid 1		Tuberculoid 2		Lepro-matous 1		Lepro-matous 2		Lepro-matous 3		Total		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Euronesians	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1
Solomon Islanders	..	..	..	..	1	..	..	..	2	..	..	..	..	3	..	3
Fijians	..	..	..	1	4	2	..	..	1	2	..	..	..	5	5	10
Indians	..	..	..	4	..	5	4	2	..	7	3	..	..	18	7	25
Chinese	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1
Gilbert Islanders	..	..	..	5	..	3	3	2	..	9	5	..	..	19	8	27
Rotumans	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	2
Totals	..			9	1	14	10	4	..	19	12	..	..	46	23	69
				10		24		4		31		..		69		

TABLE V—ADMISSIONS 1953

				N-L		T-1		T-2		T-3		L-1		L-2		L-3		Totals	
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Solomon Islanders	..	..	..	..	1	1	..	..	..	..	..	..	1	..	..	1	2	3	
Fijians	..	..	..	1	1	1	8	2	..	..	..	12	2	2	..	23	6	29	
Indians	..	..	..	2	2	1	6	2	..	..	1	1	12	1	..	21	7	28	
Chinese	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	
Rotumans	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	2	
Samoans	..	..	..	..	1	..	1	..	..	..	..	1	4	1	..	6	2	8	
Cook Islanders	..	..	..	..	1	..	..	1	..	..	..	2	2	1	..	3	4	7	
Tongans	..	..	..	..	1	..	2	..	..	..	..	1	1	1	..	4	1	5	
Gilbert Islanders	..	..	..	..	2	2	4	2	..	..	..	1	5	4	..	11	9	20	
Totals	..			..	3	9	5	21	7	..	..	1	6	38	11	2	1	71	33
				3		14		28		0		7		49		3		104	

The 104 admissions included 60 from Fiji itself, and 44 from territories overseas. Of this number, three, considered not to have leprosy, were discharged.

DISCHARGES—1952

Forty-one of the 57 patients discharged were from Fiji itself, but as more than 40 per cent of our patients are from beyond the Colony, this statement may be misleading, as suggesting very much better results among Fiji patients. It is therefore, perhaps, necessary to point out that the Fiji patients are, owing to local confidence in the follow-up system under the Leprosy Registry, discharged when they have been inactive for only one year, and other Islanders after two years. As opportunities in the other groups for checking discharged patients improve, their administrations will doubtless follow Fiji's lead in the matter.

The discharged patients include one severely crippled patient (Tuberculoid-3), and 23 with minor degrees of paralysis and deformity, though the great majority of the latter should be able to lead useful lives and support themselves with a little assistance, if necessary. With regard to the latter point, Government treats each case on its merits, and on the recommendation of the Medical Superintendent, the Lepers Trust Board augments the small Government grant in such cases.

TABLE VI—DISCHARGES 1952

				Tuber- culoid 1		Tuber- culoid 2		Tuber- culoid 3		Lepro- matous 1		Lepro- matous 2		Totals		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Euronesians	..	..	..	..	..	1	..	..	..	..	..	1	..	2	..	2
Solomon Islanders	..	..	..	..	..	1	2	..	..	..	..	..	..	1	2	3
Fijians	..	..	..	..	..	1	7	..	..	..	..	1	..	8	7	15
Indians	..	..	..	..	1	..	12	..	..	..	..	4	3	17	4	21
Samoans	..	..	..	..	..	..	..	..	..	..	..	2	2	2	2	4
Cook Islanders	..	..	..	..	..	1	4	..	1	..	..	..	1	5	2	7
Tongans	..	..	..	..	..	..	2	..	..	..	..	..	..	2	..	2
Gilbert Islanders	..	..	..	..	..	..	1	..	..	..	1	1	..	2	1	3
Totals	..	..	..	1	2	28	9	1	..	..	1	9	6	39	18	57
				3		37		1		1		15		57		

DISCHARGES—1953

Forty-one of the 87 discharged were from Fiji. Western Samoa and Cook Island Administrations followed Fiji's lead and have now adopted the principle of permitting patients to be discharged after they have been inactive for one year.

TABLE VI—DISCHARGES 1953

				T-1		T-2		T-3		L-1		L-2		Uncond.		Totals		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Europeans	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Euronesians	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1
Solomon Islanders	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1
Fijians	..	..	..	2	1	4	7	1	..	..	..	1	1	..	1	8	10	18
Indians	..	..	..	2	1	11	3	..	..	1	..	2	..	..	2	16	6	22
Samoans	..	..	..	1	1	6	1	..	..	..	..	2	..	..	..	9	2	11
Cook Islanders	..	..	..	4	2	7	3	..	..	1	..	..	1	..	..	12	6	18
Tongans	..	..	..	1	..	2	3	1	..	..	..	..	..	..	..	4	3	7
Gilbert Islanders	..	..	..	1	1	1	2	..	..	1	..	..	1	1	..	4	4	8
Totals	..	..	..	12	6	31	19	2	..	3	..	7	3	1	3	56	31	87
				18		50		2		3		10		4		87		

DEATHS—1952

Two striking facts may be noted regarding the deaths during the year—firstly, that 13 is the lowest number recorded at Makogai since 1920, when the total number of patients was only 244, and secondly, that no deaths were due to tuberculosis in any form.

Nine of the 13 deaths were directly or indirectly attributable to leprosy, which may be taken as an indication that successful as modern drugs undoubtedly are, they are still far from being always effective. On the other hand, a mortality of only 11 per thousand undoubtedly represents a tremendous improvement on previous figures.

The following list classifies the recorded causes of death during 1952.

Uraemia and Nephritis	..	..	..	..	..	4
Amyloidosis	..	..	..	..	..	2
Advanced Leprosy	..	..	..	..	..	2
Septic Osteomyelitis	..	..	..	..	..	1
Haematemesis	..	..	..	..	..	1
Cerebellar Abscess	..	..	..	..	..	1
Congestive Cardiac Failure	..	..	..	..	..	1
Cardiac Infarction	..	..	..	..	..	1

TABLE VII—DEATHS 1952

						Tuber- culoid 1		Tuber- culoid 2		Tuber- culoid 3		Lepro- matous 1		Lepro- matous 2		Lepro- matous 3		Totals		
						M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Fijians	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	1	2	3
Indians	..	..	..	..	..	1	..	..	..	..	..	1	..	3	..	1	1	6	1	7
Rotumans	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Samoans	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Gilbert Islanders	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1
Totals						..	1	..	2	1	..	1	..	4	1	1	1	9	4	13
						1		3		1		1		5		2		13		

DEATHS—1953

Only 11 deaths occurred during the year 1953, in six of these, leprosy was directly or indirectly attributable.

The causes were:—

Uraemia and Chronic Nephritis	..	..	..	..	4
Amyloidosis	..	..	..	..	1
Bronchiectasis	..	..	..	..	1
Broncho-pneumonia	..	..	..	..	1
Cardiac failure	..	..	..	..	2
Coronary Thrombosis	..	..	..	..	1
Cerebral Haemorrhage	..	..	..	..	1

TABLE VII—DEATHS 1953

				Tuber- culoid 2		Lepro- matous 1		Lepro- matous 2		Lepro- matous 3		Totals			
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Fijians	..	..	..	..	..	1	1	1	..	1	..	3	1	4
Indians	..	..	..	2	..	..	..	1	..	1	..	4	..	4
Samoans	..	..	..	1	..	..	..	..	..	..	..	1	..	1
Gilbert Islanders	..	..	..	..	..	..	..	1	..	..	1	1	1	2
Totals				..	3	..	1	1	3	1	2	..	9	2	11
				3		2		4		2		11			

TREATMENT—1952

About 65 per cent of all patients have undergone treatment with some Sulphone derivative, so that sulphones can be regarded as mainly responsible for the good results of treatment during the year. Slightly more than half this number have been taking *Sulphetrone* orally, in doses up to, and but rarely exceeding, 3.0 Gm. daily. Comparatively few of the female patients have been able to take more than 2.0 Gm. per day. Ten patients unable to tolerate sulphones in any normal dose, have improved considerably on sulphetrone injected parenterally in doses of 0.025 Gm. or 0.05 Gm., which might appear too ridiculously small to have any effect whatever. Lepromatous ulcerations of skin and pharynx of reactionary type have, however, healed under this regime when all else has failed.

Diapsone (diaminodiphenyl sulphone) in doses ranging from 0.05 Gm. twice a week to 0.2 Gm. daily, has proved equally effective with sulphetrone. Owing to its comparative cheapness, therefore, it is gradually replacing sulphetrone as our "standard" treatment, and over 300 patients have been receiving it during the year.

Thiacetazone (p-acetylaminobenzaldehyde thiosemicarbazone) has been under continued trial during the year. Twenty-eight patients have been taking the drug, and all but one have had it for 12 to 24 months, though some of the cases subject to severe reaction have been able to tolerate minimal dosage only. One Lepromatous-3 patient who had had no previous treatment, has much improved clinically, although from a bacteriological point of view he remains stationary. Of 27 patients who had proved intolerant to sulphones (16 with constant severe reactions, eight with psychotic manifestations, and three with "drug rash") ten were recorded as "Much Improved" ten as "Improved" and seven as "Stationary". From the bacteriological point of view, one T-2 case and one L-1 case became negative, 11 improved, 13 appeared stationary and one became worse.

Ethizone (p-ethylsulphonylbenzaldehyde thiosemicarbazone) was also tried on 17 patients. Seven of these were newly-admitted patients who had had no sulphone or other treatment; ten were patients who had proved intolerant to sulphones. In the former group, the only tuberculoid case developed a new patch after six months treatment, but later showed no activity; three were "Much Improved", one "Improved" and two showed little or no change. The New Zealand representative of Herts. Pharmaceuticals Ltd., kindly supplied this drug.

From these results it does not appear that Ethizone is likely to supplant the sulphones, but it may well prove a very useful auxiliary to them, whether as a part of a combined treatment or as a substitute in cases where patients are unable to tolerate them.

The only toxic sign noted was the development of albuminuria with casts and sometimes accompanied by vomiting and anorexia—a development which we had been warned to treat with respect, and which necessitated temporary interruption of the course.

Isonicotinic Hydrazide has been tested in two series—(1) as Pycazide supplied through the courtesy of Herts Pharmaceuticals Ltd., and (2) as Cotinazin, supplied through the courtesy of the American Leprosy Foundation and Pfizer Overseas Inc., of New York.

(1) *Pycazide* has had the longer test—five months, as against three for Cotinazin—as well as a harder one, having been given to patients in more advanced stages, most of whom had failed to improve under, or even to tolerate, other drugs. Fourteen of the 16 in this series had been subject to constant or frequent lepromatous reactions, which in some cases resulted in actual ulceration. In all but one of the reactionary cases the reactions either ceased or greatly diminished; in the one exception the ulceration cleared in spite of the fact that reactions continued. Three of the patients (including the last-mentioned) were also suffering from pulmonary tuberculosis, accompanied in one by tuberculosis of the spine, and in another by ischio-rectal abscesses. The two latter patients were regarded as moribund, but both have become apyretic and each has put on more than a stone in weight. All but one of the patients on Pycazide has gained in weight.

(2) *Cotinazin* has produced much less striking results, partly, perhaps, owing to the shorter period of treatment, but mainly, apparently, to the earlier stage of the disease treated. The only two patients recorded as "Much Improved" were also the only patients in the series suffering from frequent reactions before the beginning of the test. The other eight cases have so far shown no greater improvement than parallel control cases on sulphone therapy. Whether continued treatment will turn the balance in favour of the Cotinazin in this particular series appears doubtful.

On the whole it would appear that Isoniazid is more successful in the more advanced cases and particularly in those with frequent lepromatous reactions.

B. 283—Ten patients have been under treatment for the past four months with B. 283 (2-anilino-3-amino-5-phenylphenazide hydrochloride) on a daily oral dose of 250 mg. Seven of the ten show about the same degree of improvement as would have been expected under sulphone treatment; one case appeared definitely worse; and in two, the condition appeared stationary. Six of the patients gained, and four lost weight under the drug.

TREATMENT—1953

Eighty-two per cent of the patients have received treatment with a Sulphone derivative. More than half of these were given D.D.S. by mouth in doses ranging from 0.05 Gm. twice weekly to 0.2 Gm. daily: the remainder Sulphetrone by mouth in dosage ranging from 0.5 Gm. to 3.0 Gm. daily, while 17 continued satisfactorily with injections of Sulphetrone in doses of 0.025 Gm. to 0.05 Gm. twice weekly.

No major toxic manifestations occurred during the year.

Thiacetazone (p. acetylamino-benzaldehyde-thiosemicarbazone) was prescribed for 45 patients.

The original 28 patients included 27 lepromatous cases intolerant to Sulphones because of constant severe reactions, psychotic manifestations or "drug-rash". At the end of 1953, 20 were improved and seven stationary.

The 45 patients, which includes these, show the following results:—

3 Tuberculoid-2 cases	..	..	..	1 Arrested
				1 Improved
				1 Stationary
9 Lepromatous-1 cases	..	..	..	5 Improved
				3 Stationary
				1 Worse
30 Lepromatous-2 cases	..	..	..	9 Improved
				19 Stationary
				2 Worse
3 Lepromatous-3 cases	..	..	..	2 Improved
				1 Stationary
—				
45				

Only two patients continued with Ethizone—one was discharged and the other (L-2) Improved.

ISO-NICOTINIC HYDRAZIDE

As in 1952, tests continued with Pycazide and Cotinazin.

1. *Pycazide*—At the end of 1952, the 16 patients advanced cases, most of whom had failed to improve or even to tolerate other drugs, had had Pycazide for five months. In 13, reactions had either ceased or become greatly diminished. Two patients, who were regarded as moribund because of severe tuberculosis, improved amazingly.

By the end of 1953, the condition of 17 patients who had the drug for the year was—

2 Lepromatous-1 cases	..	..	..	1 Improved
				1 Died
12 Lepromatous-2 cases	..	..	..	4 Improved
				4 Stationary
				4 Worse
3 Lepromatous-3 cases	..	..	..	2 Improved
				1 Stationary
—				
17				

2. *Cotinazin*—Ten cases commenced trial in 1952. After three months, two patients were reported as "much improved". After six months, two cases showed more improvement than their counterparts on Sulphetrone, seven cases had not improved as much as their parallel cases.

At the end of the year, the position was thus:—

9 Lepromatous-2 cases	..	..	..	3 Improved
				3 Stationary
				3 Worse.
1 Lepromatous-3 cases	..	..	..	Worse.

Only one patient (L-2) was, however, any better than his counterpart on Sulphetrone.

One patient was repatriated to Eastern Samoa. As the supply of Cotinazin became exhausted towards the end of the year, the patients were given other drugs.

Apart from the possibility that it is unwise to give Iso-Nicotinic Hydrazide alone in treatment (it is recommended not to be given alone in the treatment of Tuberculosis), it would appear that this preparation may be of benefit only as an alternative in cases intolerant to Sulphones.

B. 283—(2-anilino-3-amino-5 phenylphenazide hydrochloride). Of ten patients who had received a daily dose of 250 mg. for four months, seven at the end of 1952 showed the improvement to be expected from Sulphone, one was worse and two satisfactory.

During 1953, the dosage was increased by 250 mg. on alternate days. Twenty patients at the end of 1953, are reviewed thus:—

1 Tuberculoid-1 case	..	..	..	Arrested
6 Tuberculoid-2 cases	..	..	..	4 Improved
				1 Stationary
				1 Worse
1 Lepromatous-1 case	..	..	..	Improved
11 Lepromatous-2 cases	..	..	..	4 Improved
				3 Stationary
				4 Worse
1 Lepromatous-3 case	..	..	..	Improved
—				
20				

While tuberculoid cases responded most satisfactorily, the lepromatous cases did not.

TUBERCULOSIS—1952

There are 23 notified cases of pulmonary Tuberculosis at Makogai, but only six of these have required treatment for active disease during the year. This is very gratifying as an indication that in 17 patients tuberculosis has been rendered quiescent, so that they have been able to return to their respective villages at Makogai for treatment of their residual leprosy.

Five patients were under treatment with Pneumo-Peritoneum and one with Pneumothorax. As mentioned above, in two of the cases the use of Isoniazid (Pycazide) was regarded as life-saving.

TUBERCULOSIS—1953

There are 27 cases of notified tuberculosis at Makogai. Nine developed during the year, one was transferred from Tamavua Tuberculosis Hospital, five patients were discharged from Makogai and two repatriated. Twelve patients have been treated with combination of Streptomycin, P.A.S. and Pycazide—three of these were unable to stand P.A.S. Four patients had additional treatment by pneumo-peritoneum. Not only was the tubercular condition improved but in six cases the Leprosy also improved.

During 1952 and 1953, in addition to “screening” the following X-ray examinations were made:—

	1952	1953
X-ray Examinations ..	388 chest	382 chest
	189 bones	138 bones
	59 other and dental	35 other and dental.

Visitors to Makogai during 1952 and 1953 included Mother Blanche and Sister-Anne-Marie from the Ducos Leprosarium, New Caledonia—for a month; Dr. Ferron from New Caledonia—for two weeks, and Dr. Thieme from Western Samoa—for one month; Dr. Norman R. Sloan, Dr. and Mrs Todd of the Department of Health, Papua; Mr. P. J. Twomey, M.B.E., J.P., Field Officer of the Lepers Trust Board (New Zealand) Inc., Sir Henry Scott, Q.C., Chairman of the Lepers Trust Board (Fiji) Inc., Mr. W. E. Donovan, Accountant-General of Fiji and Secretary-Treasurer of the Lepers Trust Board; Dr. R. W. D. Maxwell, Deputy Director, and Dr. J. M. Cruikshank, Director of Medical Services; Dr. L. Leiker, Netherlands New Guinea; His Excellency Sir R. H. Garvey, Governor of Fiji, and Lady Garvey; Mr. L. M. Judd, Governor of Eastern Samoa, and Mrs. Judd; Médecin Colonel Filippi, Director of Health Services, New Caledonia; Dr. G. Loiss, South Pacific Commission; Dr. Romans, Chief Medical Officer, Cook Islands; Commandeur T. G. Houdayer of the French Patrouilleur “Tiare”; Bishop O. Terrienne—Gilbert and Ellice Islands Colony; Bishop Lehman—Cook Islands.

Both A.M.P. Ropati Viliamu from Western Samoa and A.M.P. Puta from Gilbert Islands had a month of refresher course on Leprosy, while groups of Students from the Central Medical School came in turn during the year to acquire some experience in the disease and its treatment.

SUMMARY OF STATISTICS—1911–1953

	Europeans.	Euronesians.	Solomon Islanders.	Fijians.	Indians.	Chinese.	Rotumans.	Samoans.	Niue Islanders.	Cook Islanders.	Tongan.	Banabans.	Gilbert Islanders	Maoris.	Total.
Admissions	23	53	220	922	1,404	28	108	155	15	280	69	13	229	4	3,525
Repatriations	1	3	..	..	435	..	..	22	..	..	..	..	..	..	461
Discharges	6	19	70	394	415	6	57	40	2	170	23	2	58	1	1,253
Deaths	14	15	127	394	328	15	37	34	7	69	17	..	80	3	1,141
Absent without leave .. ..	..	..	1	2	1	..	..	1	..	..	..	..	..	..	5
Inmates 31/12/53	2	16	22	131	225	7	14	58	6	41	29	11	101	..	663

From 1918 to 1953 one hundred and ninety-four cases were re-admitted of whom one hundred and forty-eight with re-activity.

1952	Injections								Operations	P.M.	X-rays	Inductions Refills	Screenings	Laboratory Examinations							Visitors				
	Fluor. and S.A.T.	Vitamin Various	Sulphetrone	Penicillin	Insulin	Salvars	O-T	Various Injections						Totals	Patients Dressed	Dressings	Bact.	Helm.	Hb	BSR		Coagul.	Bc.	Totals	
January	11	6	9	254	223	17	213	171	696	3,600	5,274	..	..	52	3	4	321	281	..	223	13	..	..	838	11
February	6	2	8	204	215	3	213	124	836	3,840	5,048	10	..	68	10	12	251	395	21	453	1	..	5	1,126	2
March ..	71	..	9	107	186	8	..	283	664	3,636	5,220	13	..	25	10	..	172	330	34	440	6	..	7	989	5
April ..	34	52	8	137	99	10	..	383	723	3,553	5,355	7	..	61	9	3	176	492	17	304	14	2	7	1,012	4
May ..	91	108	9	111	105	35	..	481	940	3,853	5,418	7	1	55	8	10	202	368	19	547	6	3	11	1,156	9
June ..	26	130	9	66	105	29	..	234	599	4,471	4,998	9	..	37	8	10	175	536	20	158	2	3	14	918	10
July ..	82	50	18	79	114	14	..	200	557	3,546	4,896	7	..	62	4	9	144	428	22	518	..	2	2	116	11
August ..	68	234	17	89	53	15	..	276	752	3,485	5,066	..	..	63	14	18	205	467	17	178	1	4	4	872	2
September	82	137	37	47	59	29	..	130	521	3,539	4,916	4	..	69	12	9	162	636	..	549	2	..	2	1,351	7
October	112	98	41	121	57	48	..	178	655	3,026	4,216	5	..	43	21	3	187	466	22	160	1	3	1	840	13
November	52	122	68	166	47	9	..	85	549	2,528	3,604	3	..	54	27	14	234	279	..	347	3	1	..	1,064	5
December	67	125	95	84	47	2	..	94	514	3,330	4,574	5	..	27	11	16	236	524	..	228	..	2	1	991	15
Totals	763	1,064	328	1,465	1,310	219	213	2,629	8,001	41,719	61,208	70	1	636	137	88	46	5,192	182	4,305	49	16	54	12,273	94

1953	Injections										Dressings	Patients Dressed	Refills.	X-rays	Operations	Laboratory Examinations						Visitors		
	S.A.T. and Fluor.	Vitamin B.1 etc.	Sulphetrone	Penicillin	Insulin	N.A.B., etc.	A.T.S. T.A.T.	Mantoux	Strept.	Various						Totals	Bact.	Helminths	Urine	B.S.R.	B.C.		H.B. Sahli.	Totals
January	84	69	98	87	43	19	4	..	30	76	510	3,968	2,624	34	72	..	468	..	79	6	..	310	863	8
February	40	73	94	129	38	35	5	..	20	165	599	4,912	3,094	29	41	..	469	40	100	..	7	423	1,039	12
March	77	50	83	111	153	37	5	460	2	65	1,053	4,500	3,240	25	63	..	335	19	267	2	9	411	1,043	2
April	49	41	87	87	107	44	32	..	90	99	636	4,250	3,009	15	43	..	344	23	212	1	1	388	959	4
May	34	247	86	100	84	31	18	..	81	107	788	2,165	2,992	19	67	2	523	26	143	..	6	360	1,058	7
June	60	186	107	74	130	20	5	..	170	116	868	4,698	3,028	15	52	..	222	4	135	8	3	239	611	3
July	54	108	187	27	134	28	55	..	390	93	1,076	4,879	3,383	17	32	..	466	12	154	3	3	566	1,184	10
August	48	58	187	70	66	15	24	..	82	20	570	5,166	3,456	13	43	..	255	12	146	7	8	203	631	1
September	50	70	149	80	71	12	110	..	118	36	696	5,134	4,468	14	45	..	297	3	193	9	3	524	1,047	14
October	87	97	139	63	48	25	162	..	118	30	769	5,058	3,274	19	38	..	452	33	207	1	5	259	957	5
November	79	163	136	64	46	15	..	..	60	36	599	4,605	2,958	16	46	4	675	..	98	1	7	310	1,091	3
December	35	122	118	79	52	..	247	..	30	44	727	6,440	3,907	16	39	..	678	13	71	1	4	213	980	24
Totals	697	1,284	1,471	971	972	281	667	460	1,191	897	8,891	57,275	29,433	231	581	6	5,164	185	1,805	39	66	4,224	11,473	93

RAINFALL

Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1952	10.74	5.58	4.02	6.00	4.11	4.74	6.36	3.18	1.66	1.13	4.60	10.91	63.03
1953	16.41	17.08	9.01	10.01	3.11	7.60	5.34	0.88	0.52	3.54	0.96	4.96	79.63

APPENDIX V (b)

LEPROSY SUB-STATION, KOROVOU, SUVA.

The Sub-station was built in 1948 from funds supplied by the Fiji Government and the New Zealand Lepers Trust Board, and consists of three ranges of buildings, on an attractive hilly site overlooking Suva Harbour, the Sisters' Home; "Clean" patients' quarters, and Infected patients' quarters.

The Station serves as a gathering place for newly-discovered patients, who are collected there to await a passage to the leprosarium on Makogai. Here diagnosis is confirmed, the legal details of certification attended to, and therapy started.

The Station also houses patients who have been discharged from Makogai, and who are awaiting transport to their homes, either in Fiji or abroad.

A small number of patients who have resistant trophic ulcers are also accommodated during treatment, as they prefer to stay here among their kind, than to seek accommodation at the general hospitals.

Figures for 1953 are:—

1. Number of Patients housed pending admission to Makogai—

	<i>M.</i>	<i>F.</i>	<i>Total</i>
Fijians	18	5	23
Indians	16	7	23
Chinese	1	..	1
Rotuman	1	..	1
Solomon	1	1	2
	—	—	—
	37	13	50

2. Number of Patients housed for survey of treatment—

Fijians	4	3	7
Indians	12	..	12
Gilbertese	2	1	3
Solomon	1	..	1
	—	—	—
	19	4	23

3. Number of Discharge-cases housed during the year—

Fijians	8	10	18
Indians	17	5	22
Gilbertese	2	3	5
Samoans	11	2	13
Tongans	5	3	8
Cook Islanders	11	6	17
	—	—	—
	54	29	83

4. Total Cases Passing through the Station—

Fijians	30	18	48
Indians	45	12	57
Chinese	1	..	1
Rotuman	1	..	1
Solomon	2	..	2
Gilbertese	4	4	8
Samoans	11	2	13
Tongans	5	3	8
Cook Islanders	11	6	17
	—	—	—
	110	45	155
	==	==	==

APPENDIX VI

TUBERCULOSIS DIVISION—1952 AND 1953

Dr. L. G. Poole proceeded on leave with effect from 26th April, 1952, and Dr. F. R. Hollins took over the duties of Medical Officer in Charge, Tamavua Hospital, and Tuberculosis Control Officer in his absence. Dr. G. D. Murphy joined the staff on 11th March, 1953, and formally took over the duties of Medical Officer in Charge, from Dr. F. R. Hollins on the 23rd June, 1953.

TAMAVUA TUBERCULOSIS HOSPITAL.

2. Tamavua Hospital consists of five large ward units with a verandah along one side and end of each ward. A recreation room is available for the showing of films and other forms of entertainment which are organized from time to time. The other units comprise the main bed space, but in addition there is a small four-bedded ward which is at present used for post operative surgical cases, and a few single rooms. The kitchen provides a minimum of one thousand meals per day.

3. *Hospital Returns and Statistics—1952—*

Hospital Returns and Statistics 1952						
	Europ.	P/Europ	Fijian	Indian	Others	Total
Admissions	9	177	42	28	256	
Discharges	1	6	87	28	137	
Deaths	2	29	8	7	46	
Old cases re-admitted .	..	13	6	2	21	
In-patients transferred to Rural Hospital .. ..	..	1	3	..	4
Daily average Number of In-patients .. .. .	..	..	..	..	247
In hospital on 31/12/52	..	..	..	..	241

4. *Hospital Returns and Statistics—1953—*

	Europ.	P/Euro.	Fijian	Indian	Others	Total
Admissions	3	12	253	67	25	360
Discharges	248
Deaths	1	32	18	2	53
Old cases re-admitted	58
Old cases transferred to Rural Hospitals	6
Cases transferred to C.W.M.H. for confinement or urgent operation	18
Daily average Number of In-patients	262
In hospital on 31/12/53	270

5. A small non-tuberculous Out-patients' department operates for treating emergencies and minor ailments of staff, Fijians and Indians living in the neighbourhood of Tamavua. Ordinary cases are seen daily between 8 a.m. and 9 a.m.—emergencies, at any time.

6. TUBERCULOSIS OUT-PATIENT DEPARTMENT

The Tuberculosis Out-patient Department is extremely busy, as it deals with cases for investigation and review, collapse therapy refills, and also maintains an X-ray interpretation service for the whole Colony. The work of this department is increasing annually, due to the greater emphasis which is being placed on the prevention of spread of this disease.

The number of people attending for investigation or review has increased from 1,285 in 1952, to 2,058 in 1953. At the same time, the X-ray films which are received from all hospitals in the Colony for interpretation, has reached the large figure of 14,095 for the year 1953, and an average of 50 films per working day are reported on at this hospital.

LABORATORY

7. The Laboratory at Tamavua Hospital is staffed by four Fijian orderlies under an Assistant Medical Practitioner, and is equipped to carry out routine sputum and blood examinations on patients and staff. Other more elaborate investigations are referred to the central Laboratory at Suva. During 1952, a new incubator provided by the Anti-tuberculosis Trust Fund was installed and the culture of *myco bacterium tuberculosis* is now a routine procedure.

8. The following examinations were made during 1952 and 1953.

Year	Sputum			P.L. Swab			BSR	Mantoux	BCG	Blood Examination				Specimens sent to Suva Lab.	Guinea Pig Inoculation
	Dir.	Conc.	Cult.	Dir.	Conc.	Cult.				FBC	HB.	HB. RBC. WBC.	Total		
1952 ..	4,760	32	104	694	31	111	2,179	559	21	725	4	40	769	708	10
1953 ..	7,587	56	135	531	86	175	3,654	379	..	170	..	574	744	685	..

X-RAY DEPARTMENT

9. The following X-ray equipment was received during 1952. A mobile 100 mm. P.F. unit with 25 K.V. Onan generator for mass miniature radiography, a mobile D3 unit with screening attachment to be used as a review and treatment unit and a static unit with tomographic and mass miniature attachments for use at Tamavua Hospital. The two first mentioned were provided by the Anti-tuberculosis Trust Fund. Numerous delays occurred in the arrival of parts, thus making the work of the department difficult whilst a shortage of film aggravated the position. As a result, the number of X-rays taken during August and September, 1952, were considerably less than for other months. In addition to the equipment already mentioned, new developing tanks were received at Tamavua Hospital, and the processing room has been re-equipped and re-painted during the period under review. The MMR Unit in the Health Office was damaged in the recent earthquake and was undergoing repair at the end of the year.

10. The returns of the X-ray Department follows:—

Year	Fijians			Indians			Europeans			P/European			Rotumans			Others			Total
	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	IP.	OP.	ST.	
1952	653	706	303	231	309	21	3	43	35	40	51	7	43	40	16	70	86	3	2,660
1953	1,254	1,275	563	356	478	116	25	81	63	39	57	12	67	41	12	59	126	5	4,629

IP. = In-Patient. OP. = Out-Patient. ST. = Staff

The number of miniature films taken at Tamavua and on the mobile mass miniature machine during 1953, were as follows:—

At Tamavua	..	..	..	..	465
At Health Office	..	..	..	..	3,654 (Unit not working after
					10/9/53)
Total	..	..	..	..	4,119

DENTAL DEPARTMENT

11. A dental clinic was established at the hospital in 1952, and has been fully equipped by the Anti-Tuberculosis Fund. In the earlier part of the year, out-patients were treated in this clinic, but it is now confined entirely to in-patients of Tamavua Hospital. At least two dental sessions were held each week during the period under review.

TAMAVUA OPERATING THEATRE

12. A number of new instruments were received during 1952 and 1953, and the theatre is now equipped to undertake Pulmonary Resection, Thorocoplasty, Laparotomy, Bronchoscopy, Pneumonolysis, Phrenic Crush and excision of Tuberculous Cervical and Axillary Glands.

The following procedures were carried out during 1952 and 1953:—

Laporatory	Thoraco-plasties	Excision of Glands	Phreniclasis	Initial Plaster of Paris	Pneumo- thorax	Pneumoperi- toneum
1	30	2	163	84	21	203

Pneumothorax and Pneumoperitoneum refills—12,570.

13. The theatre was also used for Pleural Aspirations (diagnostic and therapeutic) and for the suturing of major lacerations.

P.O.P. is applied in an adjacent plaster room where a neck-harness is available.

OCCUPATIONAL THERAPY DEPARTMENT

14. This department continues to prove popular with the patients on grades, and the instal-lation of the Bandsaw has led to greater productivity. One of the main items produced is a chair with a cane back and seat. Patients are engaged in making the seats and backs; other items made are baskets and walking sticks. Knitting, embroidery and crochet work were given to the bed patients and all took a keen interest. A successful exhibition of work done by patients was held in September, 1952, by the kind permission of the Fiji Arts Club as part of their Autumn Exhibition. Assistance in these last named occupations was given by members of the British Red Cross Society who attend the hospital regularly each week. During Coronation week, a display of fancy work was entered with the Committee. The results were gratifying, as many patients were awarded miniature silver cups, Coronation Medals, and other prizes.

TAMAVUA HOSPITAL: ENTERTAINMENTS

15. Motion pictures have been shown each week for the benefit of the patients. Suva Group Theatre has given concerts during the year and their voluntary efforts have been greatly appreciated by the patients and staff. Just before Christmas, a concert was arranged by the Group, and gifts were distributed to the patients.

St. Andrews' Guild visited the Hospital prior to Christmas and distributed gifts to all patients. The Hospital Christmas tree was held on Christmas morning and gifts which were purchased from the Patients' Comforts Fund and Canteen and Occupational Therapy profits were distributed to each patient in the hospital.

PLANTATION

16. It was fortunate that when the hurricane struck, a good deal of crops in the plantation were matured, so we were able to harvest. During the year 1952, root crops and vegetables were harvested to the value of £1,152 5s. 3d.

TUBERCULOSIS CONTROL

17. *Tuberculosis Register*—A register of all new cases that are notified is kept at Tamavua Hospital. The total number in each race being appended herewith.

	1952	1953
European	3	11
Part-European	9	7
Fijian	301	359
Indian	95	93
Others	45	28
	<hr/>	<hr/>
Total	453	498

18. *B.C.G. Vaccination*—Mantoux testing and vaccination with B.C.G. to all negative reactors has been continued during 1952 and 1953.

Total No. Mantoux tested .	.. .. .	11,142
Total No. B.C.G. tested ..	.. .. .	5,311

APPENDIX VII

MENTAL HOSPITAL

Statistical figures are shown in the tables herewith.

It will be seen that there is a steady increase in the number of patients and in the latter part of the year the overcrowding became more evident. A total of 62 patients are out on trial.

The earthquake on September 14th, 1953, caused considerable damage. Almost the whole of the enclosing wall had to be rebuilt and in the mens block much damage was done to the rooms and wards by subsidence.

Mr. Sachs, the Head Attendant, returned from overseas leave on 15th June, 1953. During his absence, Mr. Fenn had acted as Head Attendant.

Details of staff are as follows:—

Medical Superintendent	
Head Attendant	
Assistant Attendant	
6 Female Samoan Orderlies	} 19 Orderlies
2 Female Fijian Orderlies	
6 Male Fijian Orderlies	
5 Male Samoan Orderlies	
2 Male Indian Cooks	

The following table shows admissions and discharges for 1953:—

Remaining in hospital at end of 1952	106
Admitted during 1953	65
	<hr/>
Discharged during 1953	6
Absent on trial during 1953	25
Died in institution in 1953	1
Remaining in hospital at end of 1953	139
	<hr/>

The following table shows the length of time of residence of the patients remaining in the mental hospital at the end of 1953:—

No. of Years	Males	Females	Total
0 to 1 year	24	20	44
1 to 5 years	24	23	47
5 to 10 „	11	5	16
10 to 15 years	5	4	9
15 to 20 „	8	3	11
20 to 25 „	3	4	7
25 to 30 „	1	1	2
30 years and over	2	1	3
	<hr/>	<hr/>	<hr/>
	78	61	139

The following shows the distribution of treated patients by type of mental disorder:—

Type of Disease	No. of Cases	Deaths
Manic Depressive	55	..
Manic	6	..
Acute Mania	8	..
Religious Mania	2	..
Paranoia and paranoid states	8	..
Schizophrenia	31	..
Mental Defective	7	..
Epilepsy	12	..
Puerperal insanity	4	..
Delusions	10	..
Idiots	3	..
Senile Dementia	23	1
Spastic diplegia and syphilis	1	..
Arterio Sclerosis	1	..
	<hr/> 171	<hr/> 1

The racial distribution and sex of those treated is as follows:—

	Males	Females	Total	Percentage
Europeans ..	9	4	13	7·6 per cent
Fijians ..	23	16	39	22·2 per cent
Indians ..	56	49	105	61·4 per cent
Others ..	9	5	14	8·2 per cent
	<hr/> 97	<hr/> 74	<hr/> 171	

The death which occurred at the institution was from the following cause and in the following class:—

General Condition	Cause
Senile Dementia	General peritonitis Ruptured duodenal ulcer

The following table shows the nationality and sex of the various patients:—

	Europeans		Fijians		Indians		Others		Total		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.
Remaining at end of 1952	7	3	13	8	32	34	6	3	58	48	106
Admitted during 1953	2	1	11	8	24	15	2	2	39	26	65
											<hr/> 171
Absent on trial during 1953	1	1	3	2	8	8	1	1	13	12	25
Discharged in 1953 .. ..	..	..	1	..	4	1	..	..	5	1	6
Died during 1953 .. ..	..	..	..	..	1	..	..	..	1	..	1
Remaining at end of 1953	9	3	20	14	42	40	7	4	78	61	139
											<hr/> 171
Total number absent on trial including those absent on trial during 1953 ..	3	4	10	6	18	20	..	1	31	31	62

Four hundred and seventy-three electro-convulsive treatments were given to 61 patients.

Visits were made by the Board of Visitors on 26th March, 25th June, and 10th October.

Gifts to the institution were as follows:—

- Messrs. Lalji & Magee, a lunch for all patients
- Dr. Williams, a parcel to each female patient containing sweets.
- Mrs. Sutton, a parcel to each European patient containing sweets, comb, cigarettes and soap.
- St. Andrew’s Presbyterian Xmas Cheer Fund £5 5s. 0d.
- M. Ali Uddan donated at Christmas for the patients, a case of mangoes, sweets and water melon.

APPENDIX VIII

LABORATORIES

TEACHING ACTIVITIES DURING 1952.

In order to provide trained staff for the various laboratories controlled by the Medical Department, the Pathology Division was charged in 1946 with the task of establishing a training school in medical laboratory technology. The School has been in continuous operation from that date, drawing its students from the local community. Of the first class to enroll three students completed the course, which lasts for three years, and leads to a locally valid Certificate of Proficiency in Laboratory Technique. These young men are now employed by the Department, in the category of Qualified Assistants.

At the beginning of 1952 there were four students on the laboratory register. One of these applied for admission to the Central Medical School and left the Laboratory on 12th January. On 23rd January he was replaced, but this student remained only till the end of the year, when he also transferred to the Central Medical School. Of the remaining three, one was successful in gaining a scholarship to an overseas university and left the Colony in February, the second most unfortunately contracted pulmonary tuberculosis, which necessarily led to the termination of his studentship, and the last student completed the year.

It is clear that only by a major effort in the future will the Laboratory training school recover from the grievous blows inflicted in 1952. Plans for the provision of trained assistants to staff both the main laboratory and its branches at Lautoka and Tamavua are now indefinitely delayed.

By arrangement between Dr. H. L. Cloud, United States Trust Territories Liaison Officer and the Medical Department, six students from American Trust Territories in the Pacific were assigned to the Pathology Division for a one year practical course in Laboratory technique. The progress made by these boys was satisfactory, and at the end of the year four of them were released with letters of commendation. The remaining two at our invitation, have been assigned to the Laboratory for a further two years, to undertake more advanced work. It is hoped that when they ultimately return home they will be well fitted for responsible laboratory appointments.

A student from Niue was accepted in February also to take the short course, and a Gilbertese dresser from Tarawa who had been assigned to the laboratory in November 1951 continued in training. A Cook Island student who first came to the Laboratory in 1950 to study informally, and who later was allowed to work with the regularly enrolled students, had to be repatriated early in the year.

The Laboratory Superintendent at the beginning of the year undertook lectures in Physics to the Central Medical School, for two hours daily. This was a temporary measure due to shortage of staff at the school.

THE HURRICANE

The Main Laboratory in Suva suffered relatively little damage from the violent hurricane which struck the town on the morning of January 28th, 1952. However pressing difficulties arose immediately after the storm, as both normal and emergency services had to be maintained with light, power and gas supplies cut off.

The success with which the services of the Laboratory were maintained under these trying conditions is a measure of the enthusiasm and hard work of the staff.

The number of specimens examined in the Central Laboratory, Suva and branch laboratory at Lautoka Hospital is attached. Owing to the absence of clerical staff in the Laboratory during part of 1952, it is regretted that it is not possible to supply the usual detailed analysis of the examinations.

The post of Pathologist which had been vacant for three years was filled in January by the appointment of Dr. M. Gosden.

TEACHING ACTIVITIES DURING 1953

In accordance with the terms of appointment of the Pathologist, a considerable amount of time was occupied during the year in lecturing to Students in the Central Medical School. The subjects on which lectures were given were General Pathology, Bacteriology, Forensic Medicine and Histology. The preparation of these lectures and material for demonstration proved a formidable task in the almost entire absence of classified material for this purpose or facilities for practical work by students. The absence of an adequate Pathological Museum will be rectified during the coming year, but the preparation of sufficient satisfactory specimens for teaching purposes will be a major task for several years to come. In addition to lectures much time has been taken up by teaching in the Post-mortem room.

At the beginning of the year six students were accepted for training in the laboratory to make up for the losses in students reported in 1952.

The question of re-organizing the syllabus of training for Laboratory Assistant will, in the light of experience since the scheme was started in 1946 have to be reviewed. There seems to be little doubt that students are coming to the Laboratory to take advantage of the high standard of scientific and mathematical training given to them in their first year, which they use to enable them to proceed overseas. As a result they have no real interest in the routine work of the Laboratory and are not amenable to its routine or discipline. More emphasis will have to be placed on technical rather than academic training if the laboratory school is to carry out its proper function of training Assistants who will remain and work in the laboratories of the Department.

Owing to the number of local students it was not thought advisable to accept students from overseas during the year; two students from the Trust Territories who had been working in the laboratory transferred to the Central Medical School.

Earthquake—The buildings suffered no major damage in the earthquake in September, but the losses in glassware and chemicals were serious. The state of the chemical store gave rise to some anxiety for a time until the more dangerous chemicals had been identified and removed from among the debris on the floor. Tribute is paid to the staff who carried out this unpleasant task, and tidied up the laboratory within a very short time after the first shock.

DIAGNOSTIC WORK OF THE LABORATORIES

An account of the examinations carried out at the Central Laboratory at Suva and branch laboratory at Lautoka for 1952 and 1953 is given below. The amount of work carried out at Lautoka shows a steady increase over the months. This laboratory is run by one qualified Assistant and a messenger, and until more staff is trained it will not be possible to supply another Assistant to this branch.

CENTRAL PATHOLOGICAL LABORATORY, SUVA—PROCEDURES—1952

Post Mortem Examinations—							
C.W.M. Hospital .. .. .	..	..	..	..	..	..	102
Annexe .. .. .	..	..	..	..	..	..	23
Private Practitioners .. .. .	..	..	..	..	..	..	1
Police .. .. .	..	..	..	..	..	..	28
							154
Histology—							
Bopsy material .. .. .	..	..	..	..	..	..	425
Autopsy material .. .. .	..	..	..	..	..	..	392
Skin Biopsies (Leprosy) .. .. .	..	..	..	..	..	..	110
Animal Tissues .. .. .	..	..	..	..	..	..	33
							960
Parasitology—							
Stools for worms and ova .. .. .	..	..	..	..	..	..	4,446
Bacteriology—							
Sputum for T.B. .. .. .	..	..	..	..	..	..	602
Throat swabs .. .. .	..	..	..	..	..	..	74
Smear for gonococchi .. .. .	..	..	..	..	..	..	1,587
							2,263
Kahn reactions .. .. .	..	..	..	..	..	..	716
Total procedures .. .. .	..	..	..	..	..	..	25,691
Vaccines—							
During the year a total of 46·6 litres of T.A.B. vaccine was prepared.							

CENTRAL PATHOLOGICAL LABORATORY, SUVA—PROCEDURES—1953

Histology—							Agglutination Test—						
Biopsy material	..	..	..	..	..	467	Typhoid and paratyphoid	..	..	..	..	121
Autopsy material	..	..	..	..	..	307	Br. abortus (animals, 12)	..	..	..	..	67
Animal Tissues	..	..	..	..	..	26	Dark Ground Illumination—					
Skin (Leprosy)	..	..	..	..	..	23	For spirochaetes	..	..	..	..	8
Morbid Anatomy (Post-mortem Examination)—							Vaccines Prepared —						
Medicolegal	..	..	..	..	..	42	T.A.B. (bottles of 50 cc.)	..	..	..	..	1,298
for C.W.M. Hospital	..	..	..	..	..	104	Autogenous	..	..	..	..	44
Annexe	..	..	..	..	..	19	Biochemistry (Blood)—					
Mental and Tamavua Hospitals	..	..	..	..	..	2	Sugar estimations	..	..	..	..	88
For Private Practitioners	..	..	..	..	..	1	T.N.P.N. } Estimations	..	..	..	..	102
Seminal Fluid	..	..	..	..	..	18	Urea					
Parasitology—							Cholesterol Estimations	..	..	..	..	4
Ova and Cysts	..	..	..	..	..	3,389	Blood Serum—					
Examination for Amoebae	..	..	..	..	..	200	Van-den-bergh	..	..	..	..	68
Film for Malaria parasites	..	..	..	..	..	51	Icteric Index	..	..	..	..	13
Microfilaria	..	..	..	..	..	123	Calcium	..	..	..	..	2
Bacteriology (Micro-Examinations)—							Proteins	..	..	..	..	55
Vaginal							Alkaline Phosphatase	..	..	..	..	2
Urethral							Takata-ara-reaction	..	..	..	..	11
Cervical							Thymol Turbidity	..	..	..	..	23
Sputa for M. tuberculosis	..	..	..	..	..	522	Urines—					
Stool for M. tuberculosis	..	..	..	..	..	112	Pregnancy test	..	..	..	..	158
Urine for M. tuberculosis	..	..	..	..	..	138	Diastatic Index	..	..	..	..	1
Lesions for M. lepral	..	..	..	..	..	455	Routine Analysis and deposit	..	..	..	..	1,266
Skin scales for Fungi	..	..	..	..	..	6	Ascorbic acid	..	..	..	..	443
Miscellaneous exudates	..	..	..	..	..	11	Methyl Red test	..	..	..	..	4
Haematology—							Sugar Estimations	..	..	..	..	20
White cell counts	..	..	..	..	..	1,336	Water balance	..	..	..	..	5
Differential counts	..	..	..	..	..	1,009	Serology—					
Haematocrit readings	..	..	..	..	..	275	Kahn tests	..	..	..	..	2,336
Red cell counts	..	..	..	..	..	838	C.S.F.—					
Haemoglobin estimation (cattle 245)	..	..	..	..	..	2,306	Cytology	..	..	..	..	584
Sedimentation Rate	..	..	..	..	..	456	Protein estimations	..	..	..	..	537
Blood groupings	..	..	..	..	..	991	Sugar estimations	..	..	..	..	164
Pre-transfusion cross matching	..	..	..	..	..	135	Chlorides	..	..	..	..	148
Rh cell testing	..	..	..	..	..	3	Faeces—					
Reticulocyte counts	..	..	..	..	..	912	Occult blood	..	..	..	..	91
Donors bled	..	..	..	..	..	135	Fat estimations	..	..	..	..	16
Marrow smears	..	..	..	..	..	147	Stercobilin	..	..	..	..	2
Bleeding time	..	..	..	..	..	10	Fractional Test Meals	..	..	..	..	72
Clotting time	..	..	..	..	..	4	Urea Clearance Test	..	..	..	..	31
Fragility	..	..	..	..	..	2	Glucose Tolerance Tests	..	..	..	..	74
Platelet	..	..	..	..	..	1	Food and Water Bacteriological Examinations—					
Cultures—							Waters	..	..	..	..	134
Sputa for M. Tuberculosis	..	..	..	..	..	85	Milks	..	..	..	..	19
Gastric washing for M. T.B.	..	..	..	..	..	217	Ice-creams	..	..	..	..	73
C.S.F.	..	..	..	..	..	52	Aerated waters	..	..	..	..	7
Faeces	..	..	..	..	..	278	Others	..	..	..	..	9
Urine	..	..	..	..	..	73	Medicolegal (other than autopsies)					
Blood	..	..	..	..	..	25	Rat Autopsies for Plague	..	..	..	..	65
Throat swabs	..	..	..	..	..	84	Animal Inoculations	..	..	..	..	27
Miscellaneous	..	..	..	..	..	100	Total Procedures					
											..	24,534	

LAUTOKA LABORATORY—PROCEDURES—1952 AND 1953

[illegible]

APPENDIX IX.

Return of Diseases and Deaths for the year 1952, at the Colonial War Memorial Hospital, Tamavua, Lautoka, Labasa and Levuka Hospitals.

NOTE.—This classification is based on the International List of Causes of Death, 1929.

Intermediate List Number		Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
I—INFECTIVE AND PARASITIC DISEASES									
A	1	001–008	Tuberculosis of respiratory system	6	349	125	49	529	106
A	2	010	Tuberculosis of meninges and central nervous system ..	..	17	10	4	31	7
A	3	011	Tuberculosis of intestines, peritoneum and mesenteric glands ..	..	25	6	4	35	6
A	4	012, 013	Tuberculosis of bones and joints .. .. .	..	33	15	5	53	..
A	5	014–019	Tuberculosis, all other forms .. .. .	..	11	14	3	28	2
A	6	020	Congenital syphilis .. .. .	..	..	1	..	1	1
A	7	021	Early syphilis .. .. .	..	2	..	2	..	..
A	8	024	Tabes dorsalis .. .. .	..	..	..	..	..	..
A	9	025	General paralysis of insane .. .. .	..	..	..	..	..	..
A	10	022, 023 026–029	All other Syphilis .. .. .	..	1	9	..	10	6
A	11	030–035	Gonococcal infections	4	33	57	2	96	..
A	12	040	Typhoid fever	4	20	25	2	51	3
A	13	041, 042	Paratyphoid fever and other Salmonella infections ..	..	13	9	..	22	..
A	14	043	Cholera .. .. .	..	..	..	..	..	..
A	15	044	Brucellosis (undulant fever) .. .. .	..	4	1	1	6	..
A	16	(a) 045	Bacillary dysentery	1	18	73	2	94	5
		(b) 046	Amoebiasis	16	12	29	5	62	2
		(c) 047, 048	Other unspecified forms of dysentery .. .. .	..	4	3	..	7	..
A	17	050	Scarlet fever .. .. .	..	..	..	..	..	..
A	18	051	Streptococcal sore throat	2	..	2	..	4	..
A	19	052	Erysipelas	1	..	..	..	1	..
A	20	053	Septicaemia and pyaemia .. .. .	..	3	1	..	4	3
A	21	055	Diphtheria .. .. .	..	..	6	..	6	2
A	22	056	Whooping cough	1	17	8	3	29	..
A	23	057	Meningococcal infections .. .. .	..	8	10	..	18	8
A	24	058	Plague .. .. .	..	..	..	..	..	..
A	25	060	Leprosy .. .. .	..	5	7	2	14	..
A	26	061	Tetanus	1	15	14	4	34	15
A	27	062	Anthrax .. .. .	..	..	..	..	..	..
A	28	080	Acute poliomyelitis	1	1	2	..	4	1
A	29	082	Acute infectious encephalitis .. .. .	..	..	1	2	3	..
A	30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis .. .. .	..	..	1	..	1	..
A	31	084	Smallpox .. .. .	..	..	..	..	..	..
A	32	085	Measles .. .. .	..	1	..	..	1	..
A	33	091	Yellow fever .. .. .	..	..	..	..	..	..
A	34	092	Infectious hepatitis	3	11	28	4	46	1
A	35	094	Rabies .. .. .	..	..	..	..	..	..
A	36	(a) 100	Louse-born epidemic typhus .. .. .	..	..	..	..	..	..
		(b) 101	Flea-borne endemic typhus (murine) .. .. .	..	..	..	..	..	..
		(c) 104	Tick-borne epidemic typhus .. .. .	..	..	..	..	..	..
		(d) 105	Mite-borne typhus .. .. .	..	..	..	..	..	..
		(e) 102, 103 106–108	Other and unspecified typhus .. .. .	..	..	..	..	..	..
A	37	(a) 110	Vivax malaria (benign, tertian)	1	..	..	..	1	..
		(b) 111	Malariae malaria (quartan) .. .. .	..	2	..	..	2	..
		(c) 112	Falciparum malaria (malignant tertian) .. .. .	..	..	..	..	..	..
		(d) 115	Blackwater fever .. .. .	..	..	..	..	..	..
		(e) 113, 114 116, 117	Other and unspecified forms of malaria	1	1	..	..	2	..
A	38	(a) 123-0	Schistosomiasis vesical (<i>S. harmatobium</i>) .. .. .	..	..	..	..	..	..
		(b) 123-1	Schistosomiasis intestinal (<i>S. Masoni</i>) .. .. .	..	..	..	..	..	..
		(c) 123-2	Schistosomiasis pulmonary (<i>S. japonicum</i>) .. .. .	..	..	..	..	..	..
		(d) 123-3	Other and unspecified schistosomiasis .. .. .	..	..	..	..	..	..
A	39	125	Hydatid disease .. .. .	..	..	..	..	..	..
A	40	(a) 127	Onchocerciasis .. .. .	..	..	..	..	..	..
		(b) Loiasis .. .. .	..	..	..	..	..	..	..
		(c) Filariasis (bancrofti) .. .. .	..	22	..	2	..	24	..
		(d) Other filariasis .. .. .	..	3	1	1	..	5	..
A	41	129	Ankylostomiasis	4	18	87	6	116	..
A	42	(a) 126	Tapeworm (infestation) and other cestode infestations ..	..	..	7	1	8	1
		(b) 130-0	Ascariasis	2	4	5	3	14	..
		(c) 130-3	Guinea worm (<i>dracunculosis</i>) .. .. .	..	..	..	..	..	..
		(d) 124, 128 130-1, 130-2	Other diseases due to helminths .. .. .	..	1	..	..	1	..
A	43	(a) 037	Lymphogranuloma venereum .. .. .	..	..	2	..	2	..
		(b) 038	Granuloma inguinale, venereal .. .. .	..	2	2	..	4	..
		(c) 039	Other and unspecified venereal diseases .. .. .	..	1	..	..	1	..
		(d) 049	Food poisoning infection and intoxication	1	7	6	1	15	..
		(e) 071	Relapsing fever .. .. .	..	..	..	..	..	..

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
(f)	072	Leptospirosis icterohaemorrhagica (Weil's disease) ..	..	3	..	..	3	..
(g)	073	Yaws .. .. .	..	22	..	4	26	..
(h)	087	Chickenpox .. .. .	..	4	1	1	6	..
(i)	090	Dengue .. .. .	..	..	2	..	2	..
(j)	095	Trachoma .. .. .	..	..	..	1	1	..
(k)	096-7	Sandfly fever .. .. .	..	..	..	..	..	..
(l)	120	Leishmaniasis .. .. .	..	..	..	..	..	..
(m)	121 (a)	Trypanosomiasis gambiensis .. .. .	..	..	..	..	..	..
	(b)	Trypanosomiasis rhodesiensis .. .. .	..	..	..	..	..	..
	(c)	Other and unspecified Trypanosomiasis .. .. .	..	..	..	..	..	..
(n)	131	Dermatophytosis	1	5	6	..	12	..
(o)	135	Scabies .. .. .	..	9	12	..	21	..
(p)	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096 1-096 6, 096 8, 096 9, 122, 132-134, 136-138	All other diseases classified as infective and parasitic ..	2	6	4	3	15	..
II—NEOPLASMS.								
A 44	140-148	Malignant neoplasm of buccal cavity and pharynx ..	..	..	9	..	9	5
A 45	150	Malignant neoplasms of oesophagus .. .. .	..	..	3	..	3	1
A 46	151	Malignant neoplasm of stomach	2	3	7	1	13	3
A 47	152, 153	Malignant neoplasm of intestine, except rectum ..	..	..	5	..	5	3
A 48	154	Malignant neoplasm of rectum .. .. .	..	..	1	..	1	1
A 49	161	Malignant neoplasm of larynx	1	..	1	..	2	..
A 50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary .. .. .	..	1	3	..	4	1
A 51	170	Malignant neoplasm of breast .. .. .	..	6	1	1	8	..
A 52	171	Malignant neoplasm of cervix uteri .. .. .	..	11	14	1	26	4
A 53	172-174	Malignant neoplasm of other and unspecified parts of uterus ..	..	3	1	..	4	1
A 54	177	Malignant neoplasm of prostate .. .. .	..	..	4	1	5	2
A 55	190, 191	Malignant neoplasm of skin	5	4	3	..	12	4
A 56	196, 197	Malignant neoplasm of bone and connective tissue ..	2	3	1	..	6	1
A 57	155, 160, 164, 165, 175, 176, 178-181, 192- 185, 198, 199	Other and unspecified sites	3	8	14	2	27	9
A 58	204	Leukaemia and aleukaemia .. .. .	..	1	..	..	1	1
A 59	200-203, 205	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	1	2	4	1	8	..
A 60	210-239	Benign neoplasms and neoplasms of unspecified nature ..	6	22	31	2	61	1
III—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES								
IV—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.								
A 61	250, 251	Nontoxic goiter .. .. .	..	1	6	..	7	1
A 62	252	Thyrotoxicosis with or without goiter	1	..	15	1	17	1
A 63	260	Diabetes mellitus	3	14	151	2	170	3
A 64 (a)	280	Beriberi .. .. .	..	2	4	..	6	1
(b)	281	Pellagra .. .. .	..	..	1	..	1	..
(c)	282	Scurvy .. .. .	..	1	..	..	1	..
(d)	283-286	Other deficiency states .. .. .	..	41	10	..	51	8
A 65 (a)	290	Pernicious and other hyperchromic anaemias	3	1	25	1	30	1
(b)	291	Iron deficiency anaemias (hypochromic)	1	12	158	5	176	5
(c)	292, 293	Other specified and unspecified anaemias	3	10	85	..	98	4
A 66 (a)	241	Asthma	5	16	125	8	154	4
(b)	240, 242-245, 253, 254, 270- 277, 287-289, 294-299	All other allergic disorders endocrine, metabolic and blood diseases	6	6	25	2	39	3
V—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.								
A 67	300-309	Psychoses	2	2	6	..	10	1
A 68	310-324, 326	Psychoneuroses and disorders of personality	5	3	23	5	36	..
A 69	325	Mental deficiency .. .. .	..	3	6	..	9	..

Intermediate List Number		Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
VI—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.									
A	70	330-334	Vascular lesions affecting central nervous system	3	6	32	2	43	15
A	71	340	Nonmeningococcal meningitis	2	19	6	3	30	15
A	72	345	Multiple sclerosis . . . . .	..	..	2	..	2	..
A	73	353	Epilepsy	2	8	6	1	17	..
A	74	370-379	Inflammatory diseases of eye	5	24	15	3	47	..
A	75	385	Cataract	7	20	28	6	61	..
A	76	387	Glaucoma	1	1	7	..	9	..
A	77 (a)	390	Otitis externa	5	1	6	1	13	..
	(b)	391-393	Otitis media and mastoiditis	2	22	46	2	72	..
	(c)	394	Other inflammatory diseases of ear	3	3	7	..	13	..
A	78	380-384, 386, 388, 389	} All other diseases and conditions of eye	3	28	25	7	63	..
	(b)	341, 344, 350-352, 360-369, 395-398		} All other diseases of the nervous system and sense organs	8	13	36	2	59	3
VII—DISEASES OF THE CIRCULATORY SYSTEM.									
A	79	400-402	Rheumatic fever	4	12	31	3	47	..
A	80	410-416	Chronic rheumatic heart disease	2	2	44	2	50	6
A	81	420-422	Arteriosclerotic and degenerative heart disease	4	6	43	5	58	15
A	82	430-434	Other diseases of heart.. .. .	3	21	85	6	115	20
A	83	440-443	Hypertension with heart disease	3	4	42	4	53	12
A	84	444-447	Hypertension without mention of heart	1	3	18	..	22	..
A	85	450-456	Diseases of arteries	1	4	8	..	13	7
A	86	460-468	Other diseases of circulatory system	10	9	27	5	51	5
VIII—DISEASES OF THE RESPIRATORY SYSTEM.									
A	87	470-475	Acute upper respiratory infections	3	23	23	1	50	..
A	88	480-483	Influenza	9	66	192	11	278	3
A	89	490	Lobar pneumonia	3	79	64	14	160	13
A	90	491	Bronchopneumonia .. .. .	..	71	88	10	169	59
A	91	492, 493	Primary atypical, other and unspecified pneumonia.. .. .	1	22	23	3	49	2
A	92	500	Acute bronchitis	4	68	67	4	143	1
A	93	501, 502	Bronchitis, chronic and unqualified	6	19	52	6	83	2
A	94	510	Hypertrophy of tonsils and adenoids	4	3	30	1	38	..
A	95	518, 521	Empyema and abscess of lung .. .. .	..	5	12	3	20	..
A	96	519	Pleurisy	2	12	9	3	26	3
A	97 (a)	523	Pneumoconiosis .. .. .	..	..	..	..	..	..
	(b)	511-517, 520-522, 524-527	} All other respiratory disease	5	27	31	14	77	1
IX—DISEASES OF THE DIGESTIVE SYSTEM.									
A	98 (a)	530	Dental Caries	3	7	15	1	26	..
	(b)	531-535	All other diseases of teeth and supporting structures	9	15	60	7	91	..
A	99	540	Ulcer of stomach	6	2	14	4	26	2
A	100	541	Ulcer of duodenum	1	3	11	7	22	..
A	101	543	Gastritis and duodenitis	5	14	48	1	68	..
A	102	550-553	Appendicitis	30	42	278	28	378	3
A	103	560, 561, 570	Intestinal obstruction and hernia	3	36	60	11	110	6
A	104 (a)	571-0	Gastro-enteritis and colitis between 4 weeks and 2 years	5	28	40	8	81	5
	(b)	571-1	Gastro-enteritis and colitis, ages 2 years and over	9	48	90	15	162	..
	(c)	572	Chronic enteritis and ulcerative colitis	4	10	4	..	18	..
A	105	581	Cirrhosis of liver	1	6	5	..	12	1
A	106	584, 585	Cholelithiasis and cholecystitis	4	4	29	1	38	2
A	107	536-539	} Other diseases of digestive system	25	247	162	14	448	13
		542, 544, 545, 573-580, 582, 583, 586, 587							

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
X—DISEASES OF THE GENITO-URINARY SYSTEM.								
A 108	590	Acute nephritis	2	7	22	2	33	1
A 109	591-594	Chronic, other and unspecified nephritis	3	14	51	1	69	10
A 110	600	Infections of kidney	4	22	88	6	120	..
A 111	602, 604	Calculi of urinary system	3	3	37	3	46	..
A 112	610	Hyperplasia of prostate	3	2	16	3	24	..
A 113	620, 621	Diseases of breast	2	12	5	2	21	..
A 114 (a)	613	Hydrocele	3	39	20	4	66	..
(b)	634	Disorders of menstruation	4	23	71	2	100	..
(c)	601, 603, 605-609, 611, 612, 614-617 622-633, 635-637	} All other disease of the genito-urinary system	24	122	310	23	479	11
			24	48	91	9	172	4
XI—DELIVERIES AND COMPLICATIONS OF PREG- NANCY, CHILDBIRTH AND THE PUERPERIUM.								
A 115	640-641, 681, 682, 684	Sepsis of pregnancy, childbirth and the puerperium .. ..	..	1	20	1	22	2
A 116	642, 652, 685, 686	Toxaemias of pregancy and the puerperium	2	24	137	5	168	2
A 117	{ 643, 644 670-672	Haemorrhage of pregnancy and childbirth	1	5	27	5	38	1
A 118	650	Abortion without mention of sepsis or toxaemia	11	16	53	21	101	..
A 119	651	Abortion with sepsis .. .. .	..	3	8	2	13	..
A 120 (a)	645-649, 673-680, 683, 687-689	} Other complications of pregnancy, childbirth and the puerperium	27	106	274	24	431	10
(b)	660		Delivery without complications	28	398	579	140	1158
XII—DISEASE OF THE SKIN AND CELLULAR TISSUE								
XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT.								
A 121	690-698	Infections of skin and subcutaneous tissue	43	245	246	32	566	2
A 122	720-725	Arthritis and spondylitis	5	29	36	7	77	1
A 123	726, 727	Muscular rheumatism and rheumatism unspecified	2	14	30	4	50	..
A 124	730	Osteomyelitis and periostitis	2	41	24	4	71	..
A 125	737, 745-749	Ankylosis and acquired musculo-skeletal deformities	1	4	6	1	12	..
A 126 (a)	715	Chronic Ulcer of Skin (including tropical ulcer)	5	12	12	1	29	1
(b)	700-714, 716	All other diseases of skin	9	11	15	2	37	..
(c)	731-736, 738-744	} All other diseases of musculo-skeletal system	2	35	24	5	66	..
XIV—CONGENITAL MALFORMATIONS.								
A 127	751	Spina bifida and meningocele . .. .	..	..	6	..	6	2
A 128	754	Congenital malformations of circulatory system .. ..	..	2	2	..	4	..
A 129	750, 752, 753, 755-759	All other congenital malformations	2	17	17	3	39	5
XV—CERTAIN DISEASES OF EARLY INFANCY.								
A 130	760, 761	Birth injuries .. .. .	..	..	..	..	..	..
A 131	762	Postnatal asphyxia and atelectasis .. .. .	..	6	8	2	16	16
A 132 (a)	764	Diarrhoea of newborn (under 4 weeks) .. .. .	..	..	..	..	..	..
(b)	765	Ophthalmia neonatorum	1	1	..	..	2	..
(c)	763, 766-768	Other infections of newborn .. .. .	..	..	1	..	1	..
A 133	770	Haemolytic disease of newborn .. .. .	..	1	..	..	1	1
A 134	769, 771, 772	All other defined diseases of early infancy .. .. .	..	14	24	1	39	15
A 135	773, 776	Ill-defined diseases peculiar to early infancy and immaturity unqualified	4	5	42	..	51	36

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
XVI—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.								
A 136	794	Senility without mention of psychosis .. .. .	..	..	8	1	9	2
A 137 (a)	788 8	Pyrexia of unknown origin	21	61	58	4	144	..
(b)	793	Observation, without need for further medical care ..	40	134	178	32	384	..
(c)	780-787, 788.1-788.7 788 9, 789-792, 795	} All other ill-defined causes of morbidity	14	30	135	9	188	3

“ E ” CODE—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE).

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
AE 138	E810-E835	Motor vehicle accidents	5	6	13	2	26	1
AE 139	E800-E802 E840-E866	} Other transport accidents .. .. .	..	3	..	2	5	..
AE 140	E870-E895	Accidental poisoning	1	1	3	1	6	1
AE 141	E900-E904	Accidental falls	1	9	21	1	32	..
AE 142	E912	Accident caused by machinery	2	7	8	1	18	..
AE 143	E916	Accident caused by fire and explosion of combustible material .. .. .	..	2	5	..	7	1
AE 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam and radiation . . . . .	..	3	7	1	11	1
AE 145	E919	Accident caused by firearm	1	7	4	1	13	2
AE 146	E929	Accidental drowning and submersion . . . . .	..	1	4	..	5	..
AE 147	(a) E920	Foreign body entering eye and adnexa	1	8	11	2	22	..
	(b) E923	Foreign body entering other orifice	2	1	3	..	5	..
	(c) E927	Accidents caused by bites and stings of venomous animals and insects	1	6	..	1	8	..
	(d) E928	Other accidents caused by animals .. .. .	..	1	1	..	2	..
	(a) E910, E911 E913-E915 E921-E922 E924-E926 E930-E965	} All other accidental causes	2	34	43	4	83	..
AE 148	E970-E979	Suicide and self-inflicted injury	3	6	25	4	38	..
AE 149	E980-E985	Homicide and injury purposely inflicted by other persons (not in war) .. .. .	..	..	..	..	..	..
AE 150	E990-E999	Injury resulting from operations of war	1	..	..	1	2	..

“ N ”—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING AND VIOLENCE (NATURE OF INJURY).

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Death
AN 138	N800-N804	Fracture of skull	1	15	12	5	33	5
AN 139	N805-N809	Fracture of spine and trunk	1	14	20	4	39	1
AN 140	N810-N829	Fracture of limbs	12	78	135	15	240	1
AN 141	N830-N839	Dislocation without fracture	5	12	10	3	30	..
AN 142	N840-N848	Sprains and strains of joints and adjacent muscle	1	34	14	2	51	..
AN 143	N850-N856	Head injury (excluding fracture)	5	9	13	6	33	2
AN 144	N860-N869	Internal injury of chest, abdomen and pelvis .. .. .	..	3	10	..	13	3
AN 145	N870-N908	Laceration and open wounds	14	77	70	14	175	1
AN 146	N910-N929	Superficial injury, contusion and crushing with intact skin surface	3	3	5	3	14	..
AN 147	N930-N936	Effects of foreign body entering through orifice	2	3	7	2	14	1
AN 148	N940-N949	Burns	3	31	32	7	73	6
AN 149	N960-N979	Effects of poisons	6	9	6	2	23	1
AN 150	N950-N959 N980-N999	} All other and unspecified effects of external causes ..	1	11	21	3	36	4

APPENDIX IX (2).

Return of Diseases and Deaths for the year 1953, at the Colonial War Memorial Hospital, Tamavua, Lautoka, Labasa and Levuka Hospitals.

NOTE.—This classification is based on the International List of Causes of Death, 1929.

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Others	Totals	Deaths
I—INFECTIVE AND PARASITIC DISEASES								
A 1	001-008	Tuberculosis of respiratory system	5	376	144	43	568	97
A 2	010	Tuberculosis of meninges and central nervous system ..	1	22	17	3	43	21
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands ..	2	17	13	2	34	4
A 4	012, 013	Tuberculosis of bones and joints .. .. .	..	42	8	4	54	..
A 5	014-019	Tuberculosis, all other forms .. .. .	..	24	17	3	44	3
A 6	020	Congenital syphilis .. .. .	..	..	..	..	..	..
A 7	021	Early syphilis .. .. .	..	..	..	..	..	..
A 8	024	Tabes dorsalis .. .. .	..	..	1	..	1	..
A 9	025	General paralysis of insane .. .. .	..	1	2	..	3	..
A 10	022, 023 026-029	All other syphilis	2	9	26	2	39	..
A 11	030-035	Gonococcal infections	3	33	30	1	67	..
A 12	040	Typhoid fever	2	12	12	1	27	2
A 13	041, 042	Paratyphoid fever and other Salmonella infections ..	1	7	6	..	14	..
A 14	043	Cholera .. .. .	..	..	..	..	..	..
A 15	044	Brucellosis undulant fever) .. .. .	..	..	..	..	..	..
A 16 (a)	045	Bacillary dysentery .. .. .	..	12	56	..	68	4
(b)	046	Amoebiasis	7	15	28	3	53	1
(c)	047, 048	Other unspecified forms of dysentery	1	2	4	..	7	..
A 17	050	Scarlet fever .. .. .	..	..	..	..	..	..
A 18	051	Streptococcal sore throat .. .. .	..	..	1	..	1	..
A 19	052	Erysipelas .. .. .	..	..	..	..	..	..
A 20	053	Septicaemia and pyaemia	1	5	..	..	6	9
A 21	055	Diphtheria .. .. .	..	2	4	..	6	1
A 22	056	Whooping cough .. .. .	..	1	..	3	4	..
A 23	057	Meningococcal infections	1	77	2	..	10	10
A 24	058	Plague .. .. .	..	..	..	..	..	..
A 25	060	Leprosy .. .. .	..	7	7	2	16	..
A 26	061	Tetanus	12	11	..	..	23	15
A 27	062	Anthrax .. .. .	..	..	..	..	..	..
A 28	080	Acute poliomyelitis	1	2	1	..	4	1
A 29	082	Acute infectious encephalitis .. .. .	..	1	1	..	2	..
A 30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis .. .. .	..	..	1	..	1	..
A 31	084	Smallpox .. .. .	..	..	..	..	..	..
A 32	085	Measles	2	..	..	..	2	..
A 33	091	Yellow fever .. .. .	..	..	..	..	..	..
A 34	092	Infectious hepatitis	4	15	13	5	37	2
A 35	094	Rabies .. .. .	..	..	..	..	..	..
A 36 (a)	100	Louse-borne epidemic typhus .. .. .	..	..	..	..	..	..
(b)	101	Flea-borne endemic typhus (murine) .. .. .	..	..	..	..	..	..
(c)	104	Tick-borne epidemic typhus .. .. .	..	..	..	..	..	..
(d)	105	Mite-borne typhus .. .. .	..	..	..	..	..	..
(e)	102, 103 106-108	Other and unspecified typhus .. .. .	..	..	..	..	..	..
A 37 (a)	110	Vivax malaria (benign, tertian) .. .. .	..	24	..	..	24	..
(b)	111	Malariae malaria (quartan) .. .. .	..	1	..	..	1	..
(c)	112	Falciparum malaria (malignant tertian)	1	1	..	..	2	..
(d)	115	Blackwater fever .. .. .	..	..	..	..	..	..
(e)	113, 114 116, 117	Other and unspecified forms of malaria .. .. .	..	1	..	..	1	..
A 38 (a)	123-0	Schistosomiasis vesical (<i>S. haematobium</i>) .. .. .	..	..	..	..	..	..
(b)	123-1	Schistosomiasis intestinal (<i>S. Mansoni</i>) .. .. .	..	..	..	..	..	..
(c)	123-2	Schistosomiasis pulmonary (<i>S. japonicum</i>) .. .. .	..	..	..	..	..	..
(d)	123-3	Other and unspecified schistosomiasis .. .. .	..	..	..	..	..	..
A 39	125	Hydatid disease .. .. .	..	1	..	..	1	..
A 40 (a)	127	Onchocerciasis .. .. .	..	..	..	..	..	..
(b)	..	Loiasis .. .. .	..	..	..	..	..	..
(c)	..	Filariasis bancrofti) .. .. .	..	22	..	4	26	..
(d)	..	Other filariasis .. .. .	..	21	78	5	104	..
A 41	129	Ankylostomiasis	1	22	36	1	60	..
A 42 (a)	126	Tapeworm (infestation) and other castode infestations ..	..	..	6	..	6	1
(b)	130-0	Ascariasis .. .. .	..	4	6	..	10	1
(c)	130-3	Guinea worm (<i>dracunculosis</i>) .. .. .	..	..	..	..	..	..
(d)	124, 128 130-1, 130-2	Other disease due to helminths .. .. .	..	1	2	..	3	..
A 43 (a)	037	Lymphogranuloma venereum	2	1	6	..	9	1
(b)	038	Granuloma inguinale, venereal .. .. .	..	2	2	1	5	..
(c)	039	Other and unspecified venereal diseases .. .. .	..	3	1	..	4	..
(d)	049	Food poisoning infection and intoxication	1	9	5	1	16	..
(e)	071	Relapsing fever .. .. .	..	..	..	..	..	..

Intermediate List Number		Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Others	Totals	Dtaths
	(f)	072	Leptospirosis icterohaemorrhagica (Weil's disease) .. .. .	..	..	..	..	..	..
	(g)	073	Yaws .. .. .	..	26	..	2	28	..
	(h)	087	Chickenpox .. .. .	..	2	2	1	5	..
	(i)	090	Dengue .. .. .	..	..	..	..	..	..
	(j)	095	Trachoma . . . . .	..	..	..	1	1	..
	(k)	096·7	Sandfly fever .. .. .	..	..	..	..	..	..
	(l)	120	Leishmaniasis .. .. .	..	..	..	..	..	..
	(m)	121 (a)	Trypanosomiasis gambiensis .. .. .	..	1	..	..	1	..
		(b)	Trypanosomiasis rhodesiensis .. .. .	..	..	..	..	..	..
		(c)	Other and unspecified Trypanosomiasis .. .. .	..	..	..	..	..	..
	(n)	131	Dermatophytosis	2	3	5	..	10	..
	(o)	135	scabies	1	19	23	..	43	..
	(p)	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096·1-096·6, 096·8, 096·9, 122, 132-134, 136-138	All other diseases classified as infective and parasitic	2	14	9	6	31	2
II—NEOPLASMS.									
A	44	140-148	Malignant neoplasm of buccal cavity and pharynx .. .. .	..	5	2	..	7	1
A	45	150	Malignant neoplasms of oesophagus .. .. .	..	..	2	..	2	1
A	46	151	Malignant neoplasm of stomach .. .. .	..	2	9	1	12	3
A	47	152, 153	Malignant neoplasm of intestine, except rectum	2	3	3	..	8	4
A	48	154	Malignant neoplasm of rectum . . . . .	..	1	5	..	6	1
A	49	161	Malignant neoplasm of larynx .. .. .	..	..	1	..	1	..
A	50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	1	1	4	..	6	..
A	51	170	Malignant neoplasm of breast	3	2	4	..	9	2
A	52	171	Malignant neoplasm of cervix uteri	1	5	11	..	17	1
A	53	172-174	Malignant neoplasm of other and unspecified parts of uterus	3	5	6	..	14	3
A	54	177	Malignant neoplasm of prostate	1	..	..	..	1	..
A	55	190, 191	Malignant neoplasm of skin	6	5	4	..	15	2
A	56	196, 197	Malignant neoplasm of bone and connective tissue	1	1	2	1	5	1
A	57	155, 160, 164, 165, 175, 176, 178-181, 192-195, 198, 199	Other and unspecified sites	7	11	10	3	31	2
A	58	204	Leukaemia and aleukaemia	2	1	..	1	4	2
A	59	200-203, 205	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system .. .. .	..	5	4	..	9	1
A	60	210-239	Benign neoplasms and neoplasms of unspecified nature	13	26	41	1	81	1
III—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES.									
IV—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.									
A	61	250, 251	Nontoxic goitre .. .. .	..	3	16	1	20	..
A	62	252	Thyrotoxicosis with or without goitre . . . . .	..	..	9	2	11	..
A	63	260	Diabetes mellitus	3	17	149	2	171	6
A	64 (a)	280	Beriberi .. .. .	..	1	2	..	3	..
	(b)	281	Pellagra .. .. .	..	..	3	..	3	..
	(c)	282	Scurvy .. .. .	..	..	..	..	..	..
	(d)	283-286	Other deficiency states .. .. .	..	15	19	6	40	5
A	65 (a)	290	Pernicious and other hyperchromic anaemias	1	2	18	..	21	1
	(b)	291	Iron deficiency anaemias (hypochromic)	2	11	112	2	127	..
	(c)	292, 293	Other specified and unspecified anaemias .. .. .	..	12	86	4	102	2
A	66 (a)	241	Asthma	13	22	134	2	171	1
	(b)	240, 242-245, 253, 254, 270-277, 287-289, 294-299	All other allergic disorders endocrine, metabolic and blood diseases	8	10	23	1	42	1
V—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.									
A	67	300-309	Psychoses	3	5	7	1	16	..
A	68	310-324, 326	Psychoneuroses and disorders of personality	9	4	17	1	31	..
A	69	325	Mental deficiency	2	4	7	..	13	..

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
VI—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.								
A 70	330-334	Vascular lesions affecting central nervous system	3	13	56	..	72	22
A 71	340	Nonmeningococcal meningitis	2	14	15	1	32	9
A 72	345	Multiple sclerosis . . . . .	..	..	1	..	1	..
A 73	353	Epilepsy	1	10	5	1	17	1
A 74	370-379	Inflammatory diseases of eye	6	25	26	2	59	..
A 75	385	Cataract	7	15	92	6	120	..
A 76	387	Glaucoma	1	4	4	..	9	..
A 77 (a)	390	Otitis externa .. ..	..	..	8	2	10	..
(b)	391-393	Otitis media and mastoiditis	4	16	39	1	60	1
(c)	394	Other inflammatory diseases of ear	2	4	3	..	9	..
A 78 (a)	380-384, 386, 388, 389	} All other diseases and conditions of eye	4	31	28	3	66	..
(b)	341, 344, 350-352, 360-369, 395-398		} All other diseases of the nervous system and sense organs ..	13	22	46	7	88	4
VII—DISEASES OF THE CIRCULATORY SYSTEM.								
A 79	400-402	Rheumatic fever	1	11	45	1	58	1
A 80	410-416	Chronic rheumatic heart disease	4	12	51	3	70	23
A 81	420-422	Arteriosclerotic and degenerative heart disease	11	14	86	2	113	22
A 82	430-434	Other diseases of heart	8	8	45	..	61	10
A 83	440-443	Hypertention with heart disease	3	4	19	2	28	4
A 84	444-447	Hypertension without mention of heart	5	1	11	3	20	2
A 85	450-456	Disease of arteries	2	1	5	1	9	5
A 86	460-468	Other diseases of circulatory system	8	12	54	3	77	6
VIII—DISEASES OF THE RESPIRATORY SYSTEM.								
A 87	470-475	Acute upper respiratory infections	10	18	22	4	54	..
A 88	480-483	Influenza	16	88	200	9	313	3
A 89	490	Lobar pneumonia	13	107	66	..	186	..
A 90	491	Bronchopneumonia	2	29	74	3	108	26
A 91	492, 493	Primary atypical, other and unspecified pneumonia.. ..	5	8	7	2	22	1
A 92	500	Acute bronchitis	5	30	63	7	105	..
A 93	501, 502	Bronchitis, chronic and unqualified	9	6	36	6	57	..
A 94	510	Hypertrophy of tonsils and adenoids	4	3	32	..	39	..
A 95	518, 521	Empyema and abscess of lung	1	8	21	1	31	8
A 96	519	Pleurisy	2	13	9	..	24	..
A 97 (a)	523	Pneumoconiosis .. ..	..	..	2	2	4	..
(b)	511-517, 520-522, 524-527	} All other respiratory diseases	4	22	30	1	57	1
IX—DISEASES OF THE DIGESTIVE SYSTEM.								
A 98 (a)	530	Dental Caries	4	8	15	..	27	..
(b)	531-535	All other diseases of teeth and supporting structures ..	6	9	30	3	48	..
A 99	540	Ulcer of stomach	8	7	28	4	47	2
A 100	541	Ulcer of duodenum	7	5	13	3	28	3
A 101	543	Gastritis and duodenitis.. ..	5	36	52	3	96	..
A 102	550-553	Appendicitis	62	34	236	22	354	5
A 103	560, 561, 570	Intestinal obstruction and hernia	14	43	65	7	129	6
A 104 (a)	571.0	Gastro-enteritis and colitis between 4 weeks and 2 years ..	8	71	43	7	129	8
(b)	571.1	Gastro-enteritis and colitis, ages 2 years and over	28	78	109	4	219	..
(c)	572	Chronic enteritis and ulcerative colitis	4	7	6	..	17	..
A 105	581	Cirrhosis of liver	3	3	9	..	15	..
A 106	584, 585	Cholelithiasis and cholecystitis	4	3	28	3	38	..
A 107	536-539	} Other diseases of digestive system	27	62	205	13	307	..
	542, 544, 545, 573-580, 582, 583, 586, 587							

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths							
X—DISEASES OF THE GENITO-URINARY SYSTEM.															
A 108	590	Acute nephritis	2	9	26	1	38	..							
A 109	591-594	Chronic, other and unspecified nephritis	3	10	38	1	52	7							
A 110	600	Infections of kidney	7	33	126	5	171	1							
A 111	602, 604	Calculi of urinary system	4	4	25	4	37	..							
A 112	610	Hyperplasia of prostate	3	3	7	..	13	2							
A 113	620, 621	Disease of breast . .. .	..	12	8	..	20	..						
A 114 (a)	613	Hydrocele	5	38	19	8	70	..							
(b)	634	Disorders of menstruation	8	19	75	5	107	..							
(c)	601, 603 605-609 611, 612 614-617 622-633 635-637	} All other diseases of the genito-urinary system	59	90	272	15	436	4							
XI—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM.															
A 115	640-641, 681, 682, 684								Sepsis of pregnancy, childbirth and the puerperium	4	21	..	25	..
A 116	642, 652, 685, 686								Toxaemias of pregnancy and the puerperium	3	5	76	..	84	2
A 117	643, 644 670-672								Haemorrhage of pregnancy and childbirth	4	12	..	16	1
A 118	650								Abortion without mention of sepsis or toxaemia	15	36	90	12	153	..
A 119	651	Abortion with sepsis	3	4	8	1	16	2							
A 120 (a)	645-649 673-680	} Other complications of pregnancy, childbirth and the puerperium	26	59	207	18	310	4							
(b)	683, 687-689 660								Delivery without complications	42	149	384	33	608	..
XII—DISEASES OF THE SKIN AND CELLULAR TISSUE.															
XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT.															
A 121	690-698	Infections of skin and subcutaneous tissue	50	229	253	26	558	1							
A 122	720-725	Arthritis and spondylitis	7	39	47	2	95	..							
A 123	726, 727	Muscular rheumatism and rheumatism unspecified	3	15	35	2	55	..							
A 124	730	Osteomyelitis and periostitis	3	52	38	5	98	1							
A 125	737, 745-749	Ankylosis and acquired musculo-skeletal deformities ..	2	9	9	..	20	..							
A 126 (a)	715	Chronic Ulcer of Skin (including tropical ulcer)	10	11	15	1	37	..							
(b)	700-714, 716	All other diseases of skin	5	12	20	..	37	..							
(c)	731-736, 738-744	} All other diseases of musculo-skeletal system	8	29	16	3	56	1							
XIV—CONGENITAL MALFORMATIONS															
A 127	751	Spina bifida and meningocele	1	..	4	..	5	3							
A 128	754	Congenital malformations of circulatory system .. ..	..	6	4	..	10	..						
A 129	750, 752, 753, 755-759	} All other congenital malformations	2	24	34	..	60	4							
XV—CERTAIN DISEASES OF EARLY INFANCY.															
A 130	760, 761	Birth injuries .. .. .	..	2	3	..	5	1						
A 131	762	Postnatal asphyxia and atelectasis .. .. .	..	..	2	..	2	..					
A 132 (a)	764	Diarrhoea of newborn (under 4 weeks) . .. .	..	1	..	..	1	..				
(b)	765	Ophthalmia neonatorum . .. .	..	..	1	..	1	..					
(c)	763, 766-768	Other Infections of newborn .. .. .	..	..	1	..	1	..					
A 133	770	Haemolytic disease of newborn . .. .	..	..	1	..	1	..					
A 134	769, 771, 772	All other defined diseases of early infancy .. .. .	..	4	19	2	25	1						
A 135	773, 776	Ill-defined diseases peculiar to early infancy, and immaturity unqualified .. .. .	..	8	15	3	26	2						

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Deaths
		XVI—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.						
A 136	794	Senility without mention of psychosis.. ..	..	1	6	1	8	3
A 137 (a)	788-8	Pyrexia of unknown origin	11	34	42	2	89	..
(b)	793	Observation, without need for further medical care .	103	252	561	90	1,006	..
(c)	780-787							
	788-1-788-7							
	788-9, 789-792, 795	All other ill-defined causes of morbidity	32	29	104	3	168	2

“ E ” CODE—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE).

Intermediate List Number	Detailed List Numbers	Cause Groups.	Euro.	Fijian	Indian	Other	Totals	Deaths
AE 138	E810-E835	Motor vehicle accidents	5	16	23	1	45	2
AE 139	E800-E802 E840-E866	Other transport accidents .. ..	..	1	3	..	4	..
AE 140	E870-E895	Accidental poisoning	3	13	2	..	18	..
AE 141	E900-E904	Accidental falls	18	36	52	4	110	..
AE 142	E912	Accident caused by machinery .	1	4	7	..	12	1
AE 143	E916	Accident caused by fire and explosion of combustible material	..	9	9	2	20	2
AE 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam and radiation .. ..	..	6	9	3	18	..
AE 145	E919	Accident caused by firearm	2	4	4	1	11	..
AE 146	E929	Accidental drowning and submersion .. ..	..	..	5	1	6	1
AE 147	(a) E920	Foreign body entering eye and adnexa	2	9	12	..	23	..
	(b) E923	Foreign body entering other orifice	1	..	2	..	3	..
	(c) E927	Accidents caused by bites and stings of venomous animals and insects .. ..	..	2	1	..	3	..
	(d) E928	Other accidents caused by animals .. ..	..	3	1	1	5	..
	(e) E910, E911 E913-E915 E921-E922 E924-E926 E930-E965	All other accidental causes	4	51	48	10	113	1
AE 148	E970-E979	Suicide and self-inflicted injury .	..	..	..	..	..	..
AE 149	E980-E985	Homicide and injury purposely inflicted by other persons (not in war)	3	10	26	2	41	..
AE 150	E990-E999	Injury resulting from operations of war .. ..	..	1	..	..	1	..

“ N ”—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY).

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
AN 138	N800-N804	Fracture of skull .	2	11	13	1	27	2
AN 139	N805-N809	Fracture of spine and trunk	7	15	17	4	43	3
AN 140	N810-N829	Fracture of limbs .	17	55	128	6	206	1
AN 141	N830-N839	Dislocation without fracture	1	10	6	..	17	..
AN 142	N840-N848	Sprains and strains of joints and adjacent muscle	3	17	16	3	39	..
AN 143	N850-N856	Head injury (excluding fracture)	6	6	11	2	25	1
AN 144	N860-N869	Internal injury of chest, abdomen and pelvis .	..	..	3	..	3	3
AN 145	N870-N908	Laceration and open wounds	15	65	70	9	159	..
AN 146	N910-N929	Superficial injury, contusion and crushing with intact skin surface	6	24	31	2	63	..
AN 147	N930-N936	Effects of foreign body entering through orifice	1	1	5	1	8	1
AN 148	N940-N949	Burns	2	30	34	8	74	1
AN 149	N960-N979	Effects of poisons .	5	4	8	1	18	1
AN 150	N950-N959 N980-N999	All other and unspecified effects of external causes .	2	7	24	2	35	..

APPENDIX X

MOSQUITO AND FILARIASIS CONTROL

MALARIA PREVENTION PROGRAMME

Rigid inspection of surface vessels and aircraft at ports of entry was maintained during the period under review. Normal methods of mosquito-control were supplemented by regular residual-spraying of all buildings at the International Airport at Nadi, with fogging of vacant lands with the T.I.F.A. machine. All drainage-systems at the Airport were maintained in good order, and further sections were sealed with concrete. All Airports were kept free from *Aedes aegypti*.

FILARIASIS CONTROL PROGRAMME

The Filariasis Control Inspectors were stationed in all areas of the Colony. They made regular visits to villages and schools, giving advice on the eradication of *Aedes scutellaris pseudo-scutellaris*, the main vector of filariasis in Fiji. The inspectors gave formal lectures, followed by advice on the control measures necessary. Each Inspector is accompanied on his rounds by a Provincial or District Constable who issues formal instructions to the village chiefs to carry out the control measures advised in each case. The village constables, in the eastern islands of Lau, have been trained as Filariasis Control Inspectors, so that transport between the islands on tours of inspection has been made unnecessary.

THE HETRAZAN EXPERIMENTS

These were begun in 1952, with the visit of a trained team, under an Assistant Medical Practitioner, to the island of Beqa, for a sample blood-survey of the whole population. Results of this blood-microfilaria survey were as under:—

	Males	Females	All population
No. of Persons Examined .	355	397	750
Microfilaria Rate* ..	197	166	181
Elephantiasis Rate .	31	23	27
“ Other Filarial ” Rate ..	206	164	184
True Filarial Rate† .	327	282	303

* Rates quoted are cases per mille of total population.
† The “ True Filariasis Rate ” is obtained by summation of (a) cases showing microfilaraemia; (b) cases showing signs of elephantiasis but no microfilaraemia; (c) cases showing other signs of filariasis, e.g. typical fever, abscesses, etc., but no microfilaraemia.

From the above Table it is seen that one-third of this island population was found to be suffering from some degree of infection with the microfilariae of elephantiasis.

All the 136 persons showing positive microfilarial tests were started on treatment by Hetrazan 150 mg. per diem for seven days, with follow-up tests and further treatment at six-monthly intervals.

A further experiment was started late in 1952 in the Ra Province of Viti Levu Island, where the following rates had been found in the course of a sample blood-survey:—

	Males	Females	All population
No. of persons examined ..	742	681	1,423
Microfilaria found in ..	190	148	170

This second group of patients was treated with a reduced dose of 50 mgm. Hetrazan on one day per month continuously, with test counts for microfilariae each six months.

The results of the experiments were as follows:—

(1) *Beqa Island*—Given 50 mgm. three times daily for seven days:—

Initial m/f counts per cc.	At start		After 6 months		After 12 months	
	No.	RPM*	No.	RPM*	No.	RPM*
0 .. .. .	..	..	71	634	62	554
1— 5	19	170	23	205	32	286
6— 10	32	330	7	63	6	54
11— 30	10	89	10	89	9	80
31— 50	11	98	1	9	1	9
51—100	30	268	..	..	2	18
100 +	5	45	..	..	..	..
All blood positive cases ..	112	1,000	41	366	50	446
Average m/f count	40		29		43	

* RPM = Rate per mille.

(2) *Ra Province*—Given 50 mgm. one day a month throughout:—

Initial m/f counts per cc.	At start		After 6 months		After 12 months	
	No.	RPM *	No.	RPM*	No.	RPM*
0 .. .. .	..	..	121	614	132	836
1— 5	75	475	29	184	25	158
6— 10	24	152	1	6	1	6
11— 30	41	260	..	..	..	..
31— 50	9	57	..	..	..	..
51—100	9	57	..	..	..	..
100 + .. .. .	..	..	..	..	..	..
All blood positive cases ..	158	1,000	30	190	26	165
Average m/f count	136		3		4	

* RPM = Rate per mille.

Comparison of these results has justified the conclusion that a single tablet taken on one day a month will keep the microfilarial rate at less than five per cc. over a period.

Further experiments with Hetrazan in various doses are now in progress in other areas of the Colony.

TRAINING SCHOOL FOR ANTI-MOSQUITO INSPECTORS

During 1952, 26 students passed through the School, and 15 in 1953.

Six Fijian members of the Staff of the Division were absent on military service in Malaya with the Fiji Military Forces, and there formed a headquarters Mosquito Control Unit.

FILARIASIS AND INSECTICIDE RESEARCH

Through a grant from the United Kingdom Development and Welfare Fund the Colonial Office has made available the services of Mr. C. B. Symes, O.B.E., Entomologist and Adviser to the Colonial Office in the use of insecticides. Mr. Symes arrived in Fiji in December 1953, to undertake research in the control of insects by the use of insecticides with special reference to filariasis. This work will extend for a period of three years.

APPENDIX XI

NUTRITION WORK 1952 AND 1953

Nutrition activities in the Colony fall into two categories. (1) Research activities which are undertaken by the Nutrition Section of the South Pacific Health Service: (2) Hospital Dietetics carried out by a Dietitian and Housekeepers in the main and district hospitals.

In 1952–53 two Nutritionists were employed by the South Pacific Health Service, and one Dietitian was appointed by the Medical Department to reorganize the catering at Tamavua Tuberculosis Hospital. Throughout the year one Nutritionist worked on education and research in Fiji.

NUTRITION ACTIVITIES

1. *Research*—A series of three seasonal nutrition surveys were carried out at Naduri Fijian Village, Sigatoka. The purpose of these surveys was to determine whether the diet of the people was influenced by the agricultural development project which was being carried out in this community.

2. A survey of heights and weights was made at two Fijian Schools in Ovalau. One school is at Moturiki where a school lunch programme has been in force for two years, the other school has no programme. The survey will attempt to determine whether the school lunch effects the rate of growth of Fijian children.

EDUCATION

Courses in nutrition and diet therapy were given to junior and senior classes of Nurses and Medical Students. Medical students receive 17 hours of lectures and Nurses 8 hours practical and 14 hours lecture during their respective courses. Lectures were also given to teachers in training, for the Education Department. Fifty-two radio talks on tropical foods and nutrition were given over the local radio and the same number of articles were prepared for the local press. Sets of five posters on infant feeding prepared in Fijian, and English were distributed to public health workers in the Colony.

HOSPITALS AND OTHER INSTITUTIONS

The kitchens for the new Central Medical School building and the Central Nursing School, were planned in conjunction with the Public Works Department, and advice was given on suitable cooking equipment. Advice on catering was given to government and mission institutions in the Colony. Simple special diets and out-patients notes were prepared in all languages for the Medical Department. The catering at the Tuberculosis Hospital was reorganized.

FOOD SUPPLIES

In June, the Senior Nutritionist attended the F.A.O./W.H.O. 3rd Regional Nutrition conference for South East Asia. Following this, discussions were held with the Fiji Agricultural Department concerning the establishment of a fish pond. One small pond was made as an experiment and *Tilapia mossambica* was imported from Malaya.

Further encouragement has been given to the use of dried skim milk in the Colony. This is now sold in all the townships and it is used in the child welfare programme. It is proving a valuable source of protein.

Following collaboration with the Nutritionist, the Prisons Department established a bulk food purchasing scheme for Government Institutions. The Nutrition Section advises on economical types of food suitable for use in these institutions.

APPENDIX XII

CENTRAL MEDICAL SCHOOL 1952 AND 1953

The four year Medical and Dental Courses leading to qualification as Assistant Medical Practitioner and Assistant Dental Practitioner respectively remained as before with considerable increase in the teaching in the Dental course due chiefly to the assistance afforded by the presence in 1952 of Dr. Cloud and in 1953 of Dr. Udick on loan from the United States Trust Territory.

In 1952 a five year medical course of considerably higher standard was introduced. Nineteen were enrolled including five Fijian Women, seven Fijian Men, five Fiji Indians and one Tongan. Of these all but two obtained passes at the end of the year.

During 1952 courses were being undertaken by students from Fiji and 11 other territories. Fijians and Fiji Indians comprised about 30 per cent of the students, the United States Trust Territories Islands formed about 25 per cent and the remainder came from other territories in the South West Pacific.

While not strictly a part of the Medical School considerable instruction is given with medical and dental students (particularly in the first years) to students enrolled in Pharmacy, Sanitation, Laboratory and Radiography courses. Nearly all of these students are housed in school quarters and consequently come directly under the discipline of the school.

	1952	1953
Medical Students in Residence	124	123
Dental Students in Residence	30	23
Other Students in Residence (Pharmacy, Sanitation, Laboratory, etc.)	32	27
Total Students in Residence	186	173
Medical Students not in Residence	5	..
Dismissals (Disciplinary)	2	1
Dismissals (Academic)	9	7
Graduating Class—Medical	9	28
Graduating Class—Dental	3	2
Post-Graduate Students	5	4

ACCOMMODATION

About half the students in 1952 and again in 1953 occupied what must be considered temporary quarters in Suva and the other half at Tamavua. The Medical Department is fully aware of the inadequacy of these quarters, and is patiently awaiting the completion of the new school building which will be ready for occupancy in 1954. It should be recorded that the students have shown commendable understanding of the situation and have accepted it with good humour. Meanwhile classroom accommodation has been exceeding difficult with the increase in size of the school, and only by almost superhuman effort was more practical work in science, anatomy and physiology achieved in 1953.

STAFF

The full time teaching staff in 1952 comprised Dr. A. S. Frater, M.B.E., Principal, Dr. A. R. Edmonds, M.B., B.S., Assistant Principal, September to December and Dr. H. L. Cloud, D.D.S., Dental Educator on loan from the United States Pacific Trust Territory. Dr. Frater resigned in August, 1953 when Dr. Edmonds became acting Principal, and Dr. E. W. Udick, D.D.S., replaced Dr. Cloud on the completion of his secondment from United States Pacific Trust Territory. The school establishment was increased by the appointment of Miss J. Reay, Science Lecturer.

Part-time teaching was provided by the Medical Officers of the Colonial War Memorial Hospital, the Pathologist as from January, 1953, and staff of the dental and health departments. Their services are provided without a remuneration. Mr. D. M. Ellerton, B.D.S., was appointed Senior Dental Officer, June 1953, and assumed responsibility for the direction of the dental course and the colony's dental services. Prior to his appointment Ratu I. L. Vosailagi acted in that capacity. Two part-time lecturers were employed during the period under review to assist in the teaching of the basic science subjects. It is appreciatedly recorded that Dr. D. J. Oldmeadow undertakes the whole of the obstetrics teaching in the maternity department of the Colonial War Memorial Hospital.

HEALTH

Despite the crowded condition of the school living accommodation the health of the students has been reasonably good. 1953 saw less hospital admissions than 1952. A not inconsiderable number of these admissions were occasioned by football injuries. Respiratory tract infectious and boils were the most prevalent other conditions.

SPORT

A Football ground at Suva and the Colonial War Memorial Hospital and Tamavua Hospital Nurses Tennis Courts provide playing space for the students. Rugby Union and Association Football teams are both doing well in the competitions and the students are showing progress in tennis. An equable distribution of Sports Fund money is difficult, but the school helps by providing transport, within reason, for matches in all forms of sport undertaken.

COLONIAL WAR MEMORIAL HOSPITAL, TAMAVUA AND OTHER HOSPITALS

The backbone of the teaching of the Assistant Medical Practitioner and Assistant Dental Practitioner must lie in the hands of their clinical instructors. Sincere thanks are accorded to the Medical and Dental Officers and other workers in the Colonial War Memorial Hospital and Tamavua Hospital; the Central Laboratory and Health Departments who have, under many difficulties carried out the clinical and practical teaching of the students. Particular mention is made of Dr. Gosden, the Government Pathologist for her teaching of Bacteriology, Histology, Pathology, Forensic Medicine and Clinical Pathology.

It should be fully realized that the staffing of a hospital which is used for teaching requires more staff than a purely service hospital.

APPENDIX XIII

CENTRAL MEDICAL RESEARCH LIBRARY

ANNUAL REPORT 1952 AND 1953

The work of the Library includes the following:—

1. Acquisition of new books.
2. Classification of new books.
3. Cataloguing of new materials received.
4. Assistance to students and others.
5. Bibliographical work for members of medical staff.
6. Lending books and periodicals.
7. Circulation and distribution of duplicate journals.
8. Clerical work.
9. Catalogue cards for periodicals.
10. Binding, repairing and care of books, etc.

During 1952 £2,000 of the original grant was spent on the acquisition of books and new furniture. The Colonial Office granted an extension of time for the use of these moneys up to December 1952. Nearly 1,000 volumes were purchased including such valuable additions to the reference sections as the *Encyclopaedia Britannica* and the Quarterly Cumulative Index Medicus. This means that while in comparison with overseas libraries stock is small, the Colony nevertheless now possesses the nucleus of an excellent working unit which careful additions in the coming years will enlarge to a fine body of medical literature.

Cataloguing and classification has been, and will continue to be, the main work of the librarian. A dictionary catalogue is being built up. For this work the international rules of the American Library Association have been adhered to and all material is classified under the Barnard system, a scheme evolved for tropical medicine.

During the year 1953 nearly 1,072 volumes were received in the Library. 263 volumes were purchased. The balance of the volumes were donated by the Guam Medical School, World Health Organization, South Pacific Commission, and the Medical Department, Suva. The total pamphlets received during the year were 55. Textbooks and other reading materials selected for acquisition during the year, were approved by the members of the Library Committee. Nearly 3,400 catalogue cards were prepared and written for all material received. All cards were arranged in alphabetical order under "letter by letter" or "all through" system.

The students of the Central Medical School and pupil nurses of the Colonial War Memorial Hospital had the use of the Library. They borrowed an average of 150 volumes per week. Assistance was given to students to find materials required for their purposes, and textbooks were also given on loan.

Most of the bibliographical enquiries during the period under review referred to the British Medical Journal, Nature, Lancet, Archives of Diseases in Childhood, Journal of Bacteriology, Biochemical Journal, the Practitioner, The Journal of American Medical Association and Endeavour. Most of the questions were answered through the aid of Quarterly Cumulative Index Medicus, which is completed up to Volume 50, December, 1951. Many back numbers of periodicals were missing, but towards the end of the year some missing numbers were received through the aid of the Library Association.

Duplicate periodicals received in the library, were circulated among various medical officers and some periodicals were distributed to the medical staff.

All accumulated papers, such as indents, invoices, bills, and general correspondence were filed properly and separately. Separate files were also opened for each indent and all their corresponding papers from 1950 were filed accordingly. An index catalogue was prepared for the filing system. Catalogue Cards were also made and prepared for all new books placed for order to the Crown Agents. This system will give efficient checking for any book received.

Personal cards for all books and periodicals given on loan were made. Books which were given on loan during 1952 were collected by the aid of this new system. A thorough check was made for each borrower and many books were discovered and collected. Lists of over-due books were prepared each quarter. A notice board for overdue books was also made and displayed in the library for students' attention.

All periodicals received during the year were entered in catalogue cards under their respective titles and main headings. Catalogue cards for all "duplicate" journals and "missing numbers" were kept and the transactions were entered accordingly. The following periodicals were received during the year.

1. Abstract of World Medicine.
2. Abstract of World Surgery, Obstetrics and Gynaecology.
3. American Medical Association, the Journal of—
4. American Review of Tuberculosis.
5. Archives of Diseases in Childhood.
6. Archivum Chirugicum Neerlandicum.
7. Australian Pharmaceutical Notes and News.
8. Bacteriology, Journal of—
9. Biochemical Journal.
10. Biological Chemistry, Journal of—
11. British Journal of Experimental Pathology.
12. British Journal of Radiology.
13. British Journal of Surgery.
14. British Medical Journal (up to 11th July, 1953 only).
15. Dental Magazine and Oral Topics.
16. Excerpta Medica.
 - (i) Anatomy.
 - (ii) Internal Medicine.
 - (iii) Medical Microbiology and Hygiene.
 - (iv) Obstetrics and Gynaecology.
 - (v) Surgery.
 - (vi) Tuberculosis.
17. Experimental Medicine, Journal of—
18. Fiji Royal Gazette (through Principal, C.M.S.)
19. Health Education Journal.
20. Health Horizon.
21. Hospital and Health Management.
22. Hygiene, Bulletin of—
23. Lancet.
24. Library Association Record.
25. Libraries, Bulletin for—
26. Medical Journal of Australia.
27. Medical Officer.
28. Mother and child.
29. NAPT Bulletin.
30. Nature.
31. Nutrition, The Journal of—
32. Pathology and Bacteriology, the Journal of—
33. Pharmaceutical Journal.
34. Pharmacy International.
35. Practical Mechanics.
36. Practitioner.
37. Royal Sanitary Institute, Journal.
38. Science News Letter.
39. Transactions of the Royal Soc. of Trop. Medical and Hyg.
40. Tropical Diseases Bulletin.
41. Tropical Medicine and Hygiene, the Journal of—
42. Tuberculosis Index and Abstracts.
43. What's new ?
44. W.H.O. Bulletin.
 - (ii) Chronicle of
 - (iii) Epidemiological Reports.
 - (iv) International Digest of Health Legislation.
 - (v) Reliève Epidemiologica!
 - (vi) Weekly Fasciculus.

The British Medical Association of (Fiji Branch), has also stored its periodicals in the library, and the following were received during the year.

1. Abstract of World Medicine.
2. Abstract of World Surgery, Obstetrics and Gynaecology.
3. Annals of Rheumatic Diseases.
4. Archives of Diseases in Childhood.
5. British Heart Journal.
6. British Journal of Industrial Medicine.
7. British Journal of Pharmacology and Chemotherapy.
8. British Journal of Preventive and Social Medicine.
9. British Journal of Social Medicine.
10. British Journal of Venereal Disease.
11. British Medical Bulletin.
12. Clinical Pathology, the Journal of—
13. Medical and Biological Illustration.
14. Neurology Neurosurgery and Psychiatry, the Journal of
15. New Zealand Medical Journal.
16. Obstetrics and Gynaecology of the British Empire, the Journal.
17. Thorax.

All books with hard covers were treated with book varnish and clear varnish before they were put on shelves. All books and other materials except journals, were marked with "accession No." and "location No.", a system by which books could be easily traced if required. All periodicals were kept in a group with their previous numbers and on completion were forwarded to the Government Printer for binding into volumes. From July to December 1953, approximately 257 volumes of journals were bound by the Government Printer. The titles on all bound journals were done in the library. Several textbooks and other reading materials were found damaged they were repaired in the library and brought into good handling condition.

Mrs. Frater, Librarian, resigned with effect from 21st July, 1953; since then Mr. Salim Baksh has performed the duties of Librarian.

APPENDIX XIV

METEOROLOGICAL REPORTS FOR 1952 AND 1953.

LAUCALA BAY					SUVA				

APPENDIX XV

URBAN/TOWNSHIP/RURAL SANITARY DISTRICTS OF FIJI
REPORT OF HEALTH INSPECTOR FOR YEARS OF 1952 AND 1953

1—SUMMARY OF INSPECTIONS

Type of Premises, etc.	1952		1953		1952	1953
	Inspection	Re-inspections	Inspections	Re-inspections	Total	Total
House to house Inspection of district	29,354	11,889	21,336	13,305	41,243	34,641
Investigation of complaints, nuisances, etc. ..	826	678	807	974	1,504	1,781
New buildings sites—before approval	797	....	593	425	797	1,018
New buildings works in progress	1,473	587	1,529	1,146	2,060	2,675
Investigation of infectious disease and disinfection	312	72	445	83	384	528
Shipping	289	53	194	....	342	194
Aircraft	884	....	928	....	884	928
House let as lodgings and lodging houses	1,120	860	489	1,709	1,980	2,198
Factories and workshops	424	118	292	302	542	594
Cemeteries	305	33	105	....	338	105
Schools	362	62	291	144	424	435
Checking sanitary services (a/cs, etc.)	1,187	....	324	....	1,187	324
Laundries	625	239	765	167	864	932
Hairdressers, chiropodists, etc.	926	168	451	446	1,094	397
Foodshops, foodstores, markets, etc.	2,923	869	3,273	438	3,792	3,711
Eating houses and ice cream premises	2,120	499	1,459	797	2,619	2,256
Aerated water and ice factories	325	101	648	408	426	1,056
Kava saloons	198	33	162	10	231	172
Bakehouses	692	114	580	67	806	647
Butcher shops	212	25	204	54	237	258
Slaughterhouses	135	17	120	26	152	146
Food vehicles	397	21	403	137	418	540
Hawkers premises	127	30	30	3	157	33
Shops other than food shops	242	46	9	....	288	9
Dairies, hotel, boarding house	63	14	51	15	77	66
Inspection of gangs work	432	....	511	....	432	511
Sanitary survey of ships	73	77	75	....	150	75
Miscellaneous	483	120	41	22	603	53
Total	47,306	16,725	36,098	20,668	64,031	56,766

2—WRITTEN NOTICES, ETC., ISSUED

	1952	1953
Intimation Notices served	3,219	3,957
Statutory Notices served	56	182
Buildings Surveyed for Closure or Demolition ..	368	326
Closing Orders served	172	324
Demolition Orders served	48	118
Buildings Demolished after service of Orders—		
By Owners	92	178
By Local Authority	1	5

3—BUILDING APPLICATIONS DEALT WITH

	1952		1953	
	No.	Value	No.	Value
Applications in respect of New Buildings ..	985	£612,784	1,699	£808,839
Applications in respect of Alterations and Repairs	106	16,369	189	41,248
Applications in respect of Septic Tanks . .	42	2,096	58	8,014
Total	1,133	£631,213	1,939	£858,101
Buildings Completed and Passed during year ..	873		526	
Applications Outstanding in Register (work not completed) at end of year—				
New Buildings	694		2,738	
Alterations and Repairs	53		210	
Septic Tanks	22		107	

4—SUMMARY OF SANITARY IMPROVEMENTS, ETC. (ALL TYPES OF PREMISES.)

<i>Items</i>	1952		1953	
	<i>Order</i>	<i>Completed</i>	<i>Order</i>	<i>Completed</i>
Repairing of buildings.	329	269	384	379
Improvements to Lighting and Ventilation of Buildings	224	183	463	257
Removal of Unauthorized Erections	86	65	189	158
Abatement of Overcrowding	124	86	110	88
New Privies (all types)	1,527	1,315	1,385	1,272
Repairing, Cleansing or Flyproofing of Privies	2,710	2,260	1,997	1,704
Filling in of Insanitary Privies	997	859	801	767
New Bathrooms or Washing Places	174	113	234	220
Repairing or Cleansing of Bathrooms or Washing Places	775	601	555	422
New Kitchens	211	146	250	186
Repairing or Cleansing of Kitchens	463	377	594	470
Provision of New Drains	627	464	592	456
Repairing or Cleansing of existing Drains	1,992	1,674	1,589	1,467
New Wells	192	172	288	188
Repairing or Improvement of Wells	523	418	552	475
New water Tanks	62	46	68	46
Repairing, Screening or Cleansing of Water Tanks	112	104	237	126
Removal of Accumulations of Refuse, etc.	3,924	3,622	3,119	2,819
Clearing of Overgrowth or Long Grass	3,126	2,872	3,198	2,622
Provision of Garbage Tins	623	565	1,388	1,001
Abatement of Nuisances from Animals or Poultry	719	623	6,649	1,110
Abatement of Mosquito Breeding	1,717	1,759	1,082	938
Cleansing of Food Premises	721	689	929	740
Structural Improvements to Food Premises	101	90	717	527
Cleansing of Food Vehicles	152	143	261	252
Improvements to Food Vehicles	78	63	213	208
Cleansing or Improvement of Hairdressers Premises	247	216	151	128
Cleansing or Improvement of Laundries	126	93	97	85
Cleansing or Improvement of Schools	41	22	115	33
Cleansing or Improvement of Shipping	134	90	137	85
Impounding of Straying Cattle	36	36	76	76
Miscellaneous	1,421	1,160	726	680
Total	24,294	21,195	24,146	19,985

5—MOSQUITO CONTROL

	1952	1953
Premises Inspected for Mosquito Larvae	20,041	16,912
Premises at which larvae found	1,872	1,420
Larval Index	9.34 per cent	8.29 per cent

6—DISINFECTION, DISINFESTATION AND FUMIGATION

		1952	1953
<i>Type of Premises or Vessels</i>	<i>Method</i>	<i>No.</i>	<i>No.</i>
Overseas Vessels	H.C.N.	15	7
Local Vessels	Aerosol Bomb	19	13
Local Vessels	H.C.N.	75	50
Dwellings	Formalin Cyllim Zaldecide	5	41
Dwellings	Formalin Zaldecide	170	287
Aircraft	D.D.T.	5	5
Aircraft	Aerosol Bomb	379	328
International Deratting Certificates Issued		16	11
International Deratting Exemption Certificates Issued		1	3

7—ANTI-RAT MEASURES

	1952		1953		1952	1953
	<i>Rattus</i>	<i>Rattus</i>	<i>Rattus</i>	<i>Rattus</i>		
	<i>Rattus</i>	<i>Norvegicus</i>	<i>Rattus</i>	<i>Norvegicus</i>	<i>Total</i>	<i>Total</i>
Rats destroyed by trapping	2,428	1,212	449	485	3,640	934
Rats destroyed by fumigation	3	..	..	..	3	18
Overseas shipping	78	5	18	..	83	19
Local shipping	Nil	Nil	19	..	Nil	Nil
Aircraft	47	42	Nil	Nil	11,988	4,701

8—FOOD INSPECTION AND SAMPLING

Unsound foodstuffs condemned and destroyed—General 1952, 14,367 lb.; 1953, 46,363 lb

	1952	1953		1952	1953
Food and Water samples taken—					
Milk—Genuine	63	69	Fresh water (Bact.) . . .	152	104
Non Genuine	21	65	Salt water baths (Bact.) . .	45	13
Ice cream—Genuine	20	25	Aerated water	4	4
Non Genuine	52	41	Water chemical .. ..	..	55

9—LEGAL PROCEEDINGS

Defendants, offences and results of action—

<i>Public Health Ordinance</i>					<i>Pure Food Ordinance</i>				
	1952		1953			1952		1953	
Cases	23		61		Cases	22		39	
Convictions	21		59		Convictions	19		37	
Penalties . . .	£62 10 0		£149		Penalties . . .	£161	£277 19 0		

10—REMARKS AND DETAILS OF ANY OTHER SPECIAL WORKS CARRIED OUT DURING THE MONTH UNDER REVIEW

<i>Sanitation Campaign</i>				1952	1952
Squatting slabs sold	..	..	..	390	267
Pedestal Slabs sold .	..	..	..	44	52

